# BULLETIN

OF THE

## AMERICAN PHYSICAL SOCIETY

Supplement to Vol. 1, No. 10, June 3, 1926

## CONSTITUTION AND BY-LAWS
AND
## MEMBERSHIP LIST

JULY, 1926

PUBLISHED BY THE AMERICAN PHYSICAL SOCIETY
SIX ISSUES EACH YEAR

# Constitution and By-Laws

and

# Membership List

of the

# American Physical Society

July, 1926

---

CONTENTS


List of Officers ..... 3
Past Officers ..... 4
Constitution ..... 6
By-Laws ..... 8
Honorary Members ..... 10
Fellows and Members ..... 10

# BULLETIN

of the

AMERICAN PHYSICAL SOCIETY

Published six times per year

---

Subscription price: $1.00 per year.

The Bulletin of the American Physical Society is published six times a year during the months of February (2 issues), April, June, November, and December at 450 Ahnaip Street, Menasha, Wisconsin.

Address correspondence to Secretary H. W. Webb, Columbia University, New York, N. Y.

---

Entered at the post office at Menasha, Wisconsin, as second class matter.

# The American Physical Society

## OFFICERS OF THE SOCIETY FOR 1926

*President*

D. C. MILLER, Case School of Applied Science, Cleveland, Ohio

*Vice-President*

K. T. COMPTON, Princeton University, Princeton, N. J.

*Secretary*

HAROLD W. WEBB, Columbia University, New York City

*Treasurer*

G. B. PEGRAM, Columbia University, New York City

*Editor*

JOHN T. TATE, University of Minnesota, Minneapolis, Minn.

*Local Secretary for the Pacific Coast*

D. L. WEBSTER, Stanford University, California

## COUNCIL

*The Council of the Society consists of the president, vice-president, secretary, treasurer, managing editor, all living Past Presidents and eight elected members as follows:*

*Past Presidents*

A. A. MICHELSON
CARL BARUS
E. L. NICHOLS
HENRY CREW
W. F. MAGIE
ERNEST MERRITT
R. A. MILLIKAN
J. S. AMES
THEODORE LYMAN
C. E. MENDENHALL

*Elected Members*

A. H. COMPTON
E. P. LEWIS
F. C. BLAKE
W. F. G. SWANN
A. L. HUGHES
F. C. BROWN
A. S. EVE
A. W. HULL

# PAST OFFICERS
## OF
## THE AMERICAN PHYSICAL SOCIETY

---

### PRESIDENT

| | | | |
|---|---|---|---|
| Henry A. Rowland | 1889–1900 | Ernest Merritt | 1914–1915 |
| Albert A. Michelson | 1901–1902 | R. A. Millikan | 1916–1917 |
| Arthur G. Webster | 1903–1904 | H. A. Bumstead | 1918 |
| Carl Barus | 1905–1906 | J. S. Ames | 1919–1920 |
| Edward L. Nichols | 1907–1908 | Theodore Lyman | 1921–1922 |
| Henry Crew | 1909–1910 | C. E. Mendenhall | 1923–1924 |
| W. F. Magie | 1911–1912 | D. C. Miller | 1925– |
| B. O. Peirce | 1913 | | |

### VICE-PRESIDENT

| | | | |
|---|---|---|---|
| Albert A. Michelson | 1899–1900 | K. E. Guthe | 1914–1915 |
| Arthur G. Webster | 1901–1902 | H. A. Bumstead | 1916–1917 |
| Elihu Thomson | 1903–1904 | J. S. Ames | 1918 |
| D. B. Brace | 1905 | W. C. Sabine | 1919 |
| E. L. Nichols | 1906 | Theodore Lyman | 1919–1920 |
| Henry Crew | 1907–1908 | C. E. Mendenhall | 1921–1922 |
| W. F. Magie | 1909–1910 | Dayton C. Miller | 1923–1924 |
| B. O. Peirce | 1911–1912 | K. T. Compton | 1925– |
| Ernest Merritt | 1913 | | |

### SECRETARY

| | | | |
|---|---|---|---|
| Ernest Merritt | 1899–1912 | Dayton C. Miller | 1918–1922 |
| A. D. Cole | 1913–1917 | Harold W. Webb | 1923– |

### TREASURER

| | | | |
|---|---|---|---|
| William Hallock | 1899–1907 | G. B. Pegram | 1918– |
| J. S. Ames | 1907–1917 | | |

### ELECTED MEMBERS OF THE COUNCIL

| | | | |
|---|---|---|---|
| H. S. Carhart, M. I. Pupin | 1899–1900 | E. H. Hall, B. O. Peirce | 1903–1906 |
| W. F. Magie | 1899–1901, 1902–1906 | W. S. Franklin, E. Rutherford | 1904–1907 |
| A. G. Webster | 1899–1901, 1905–1908 | E. P. Lewis, F. E. Nipher | 1905 |
| C. S. Hastings | 1899–1902 | R. A. Millikan, A. Trowbridge | 1906–1909 |
| J. S. Ames | 1899–1903, 1905–1908 | H. A. Bumstead, C. E. Mendenhall | 1907–1910 |
| E. L. Nichols | 1899–1903 | W. C. Sabine, S. W. Stratton | 1908–1911 |
| A. L. Kimball | 1901–1902 | | |
| H. Crew, E. B. Rosa | 1901–1904 | | |
| C. Barus, D. B. Brace | 1902–1904 | | |

J. C. McLennan, E. F. Nichols ..... 1909–1912
K. E. Guthe, C. A. Skinner ..... 1910–1913
R. A. Millikan, J. Zeleny ..... 1911–1914
H. A. Bumstead, T. Lyman ..... 1912–1915
H. T. Barnes, W. J. Humphreys ..... 1913–1916
G. K. Burgess, D. C. Miller ..... 1914–1917
C. E. Mendenhall, G. W. Stewart ..... 1915–1918
I. Langmuir ..... 1916–1919
G. B. Pegram ..... 1916–1918
G. O. Squier, H. A. Wilson ..... 1917–1920
A. L. Day, G. F. Hull ..... 1918–1921
Max Mason ..... 1919
G. K. Burgess, J. C. McLennan ..... 1919–1922
F. B. Jewett, Max Mason ..... 1920–1923
K. T. Compton, H. M. Randall ..... 1921–1924
H. G. Gale, D. L. Webster ..... 1922–1925
F. C. Brown, A. L. Hughes ..... 1923–1926
A. S. Eve, A. W. Hull ..... 1924–1927
F. C. Blake, W. F. G. Swann ..... 1925–1928
A. H. Compton, E. P. Lewis ..... 1926–1929

## MANAGING EDITOR

Frederick Bedell ..... 1913–1922
G. S. Fulcher ..... 1923–1925
John T. Tate ..... 1926–

## BOARD OF EDITORS

J. S. Ames, B. O. Peirce, John Zeleny ..... 1913
K. E. Guthe, W. F. Magie, C. A. Skinner ..... 1913–1914
J. C. McLennan, R. A. Millikan, E. F. Nichols ..... 1913–1915
H. A. Bumstead, C. E. Mendenhall, A. G. Webster ..... 1914–1916
J. S. Ames, Edgar Buckingham, A. A. Michelson ..... 1915–1917
E. P. Lewis, W. C. Sabine, A. Trowbridge ..... 1916–1918
N. E. Dorsey, Wm. Duane, O. M. Stewart ..... 1917–1919
G. K. Burgess, A. D. Cole, A. C. Lunn ..... 1918–1920
Henry Crew, L. V. King, H. S. Uhler ..... 1919–1921
E. L. Nichols, C. M. Sparrow, W. F. G. Swann ..... 1920–1922
G. S. Fulcher ..... 1921–1922
F. A. Saunders, O. M. Stewart ..... 1921–1923
E. P. Adams, A. J. Dempster, A. L. Hughes ..... 1922–1924
A. H. Compton, E. H. Kennard, Leigh Page ..... 1923–1925
H. D. Babcock, W. G. Cady ..... 1924–1926
John T. Tate ..... 1924–1925
K. K. Darrow, E. C. Kemble, F. L. Mohler ..... 1925–1927
J. A. Gray, G. E. M. Jauncey, J. H. Van Vleck ..... 1926–1929
L. W. McKeehan ..... 1926

## CONSTITUTION

### ARTICLE I—Name

This Society shall be called the American Physical Society.

### ARTICLE II—Object

The object of the Society shall be the advancement and diffusion of the knowledge of physics.

### ARTICLE III—Fellowship and Membership

1. The membership of the Society shall consist of fellows, members, and honorary members.

2. There shall be elected to fellowship only such persons as have contributed to the advancement of physics by independent, original research, or who have rendered some other special service to the cause of the science which is considered equivalent to such investigation. The fulfilment of these qualifications shall be determined by an examination of the published works of the candidate.

3. There may be elected to membership persons of any of the following classes: (a) graduate students specializing in physics; (b) teachers of physics in colleges and secondary schools who have not yet completed investigations which warrant election to fellowship; (c) other physicists whose work of investigation is not sufficient for qualification as fellows; (d) persons engaged in lines of work related to physics, such as mathematics, astronomy, etc.; (e) persons who are not professionally engaged either in physics or related lines, but whose interest and activity in the science would make them desirable members. Members have all the privileges of fellows except that they may not vote or hold office.

4. Honorary members shall be persons of acknowledged preeminence in the science of physics. American physicists shall not be eligible to honorary membership. Honorary members shall have all the privileges of fellows, except that they may not vote or hold office; they shall be exempt from all dues and assessments.

### ARTICLE IV—Election of Fellows and Members

1. For the election of a new fellow or member of the Society, or for the transfer of a member to fellowship, a nomination in due form signed by two fellows or members of the Society shall be presented at a meeting of the Council and at a meeting of the Council, occurring at least two weeks later, the person named in such nomination shall receive the favorable ballots of a majority of the Councilors present. The Council may, however, at its discretion make election to membership at the same meeting at which the nomination is presented.

2. A nomination for honorary membership shall be made by vote of the Council at a regular meeting of the Society, or by a petition in due form signed by not less than five members of the Council and submitted to the Secretary. A nomination so presented shall be submitted by the Secretary to letter ballot of all the members of the Council. For election to honorary membership the nominee shall receive the favorable votes of not less than three-fourths of the entire membership of the Council.

### ARTICLE V—Officers

The officers of the Society shall be a President, a Vice-President, a Secretary, a Treasurer, and a Managing Editor.

## Article VI—Council and Board of Editors

1. The President, Vice-President, Secretary, Treasurer, and Managing Editor, and all those who have at any time held the office of President of the Society, together with eight other members to be elected in the manner specified in Art. VII, shall constitute a Council, which shall have general charge of the affairs of the Society.

2. A board of editors, consisting of the Managing Editor and nine other members to be elected in the manner specified in Art. VII, shall have charge, under the direction of the Council, of the publication of a journal of experimental and theoretical physics, to be entitled "*The Physical Review.*" The functions of the board shall include both the editorial and business management of the journal.

## ARTICLE VII—Election of Officers

1. The officers of the Society and the elected members of the Council and of the Board of Editors shall be elected by ballot at the Annual Meeting of each year. At least eight weeks before the Annual Meeting the Secretary shall send to each fellow of the Society a request for nominations, specifying the offices which are to be filled. The name of every candidate nominated by not less than twenty fellows shall be printed on the official ballot. The ballot shall also contain the name of a candidate proposed by the Council for each office and blank spaces in which the voter may substitute other names. A copy of the official ballot shall be sent to each fellow not less than four weeks before the Annual Meeting. Such a ballot, if marked by a qualified voter to indicate his choice, and if returned to the Secretary in a sealed envelope bearing the name of the voter, shall be counted at the Annual Meeting. A ballot properly marked and endorsed by a qualified voter may be cast in person at the Annual Meeting. A majority of all votes cast in person or by letter ballot shall be necessary for election. In case of failure to secure a majority for any office, the fellows present at the Annual Meeting shall choose by ballot one of the two candidates having the highest number of votes for that office.

2. The term of office shall be one year for the President, Vice-President, Secretary, and Treasurer, four years for the elected members of the Council, and three years for the Managing Editor and the other members of the Board of Editors. Each official shall hold office until his successor is elected and has qualified.

3. No fellow shall be elected as President more than two years in succession. No elected member of the Council and no member of the Board of Editors other than the Managing Editor, having completed a full term as specified above, shall be re-elected until after the intervention of at least one year.

4. If an office for any reason becomes vacant, the vacancy shall be filled by the Council for the remainder of the term. If any elected member of the Council or of the Board of Editors vacate his position more than one year before the expiration of his term, the vacancy for the unexpired term shall be filled by the Society, by ballot, at the Annual Meeting.

## ARTICLE VIII—Amendments

No part of this Constitution shall be amended or annulled except by a vote taken at an Annual Meeting of the Society in the following manner: Any proposed amendment to this Constitution, accompanied by a proper ballot form, shall be submitted to all fellows of the Society at least four weeks in advance of the meeting at which such amendment is to be considered. Every ballot marked by a qualified voter to indicate his vote and returned to the Secretary in a sealed envelope bearing the name of the voter shall be counted at the meeting. A ballot properly marked and endorsed by a qualified voter may be cast in person at the Annual Meeting. The adoption of the

proposed amendment shall require the affirmative votes of not less than two-thirds of the fellows voting in person at the meeting together with those voting by letter ballot.

## BY-LAWS

### ARTICLE I—Dues

1. The annual dues of fellows shall be twelve dollars and of members nine dollars, payable on the 1st of January.

2. The membership of each new fellow or member shall date from the January 1st nearest to the time of his election and he shall be entitled to receive periodicals from that date, as provided in Article VI.

3. If the dues of any fellow or member remain unpaid beyond a reasonable time, the Council, after due notice, shall remove his name from the membership list.

4. Newly elected fellows, or members tranferred from membership to fellowship, shall pay a fee of three dollars. There shall be no entrance fee for newly elected members.

### ARTICLE II—Meetings

At least four regular meetings shall be held each year, at such times and places as shall be ordered by the Council. One of these, to be called the Annual Meeting, shall be held on a day to be determined by the Council, between the 26th and 31st of December, inclusive. Notices of the time and place of each meeting shall be sent by the Secretary to all fellows and members of the Society.

### ARTICLE III—Meetings of the Council

1. There shall be a meeting of the Council at the time and place of each regular meeting of the Society.

2. The President shall convoke the Council in special meeting, whenever the affairs of the Society require it.

3. A request in writing from five members of the Council shall render the convocation of the Council obligatory.

### ARTICLE IV—Presidential Address

It shall be the duty of the President to deliver an address before the Society at the Annual Meeting next succeeding his first election as President of the Society.

### ARTICLE V—Papers

1. Only those titles of papers shall be listed on the preliminary program of a meeting of the Society for which abstracts for publication are in the hands of the Secretary.

2. A separate program shall be announced for each session, due allowance being made for discussion. Each session shall begin with the papers announced for that session, even when the program of the preceding session has not been completed.

3. When two or more papers are offered by the same fellow or member, one only of these will be assigned a place on the regular program, while the others will be placed in a supplementary program, to be called for if time permits.

4. Papers received after the program has been printed will be placed in the supplementary program.

5. Except by special vote of the Society, the maximum allowance of time for the presentation of a paper shall be ten minutes. The presiding officer shall enforce this rule.

## ARTICLE VI—Journals

1. All fellows and members of the Society, in full standing, shall receive *The Physical Review*, published monthly by the Society; they shall also receive, without extra charge, *Science Abstracts, Section A—Physics*. Any fellow or member may obtain *Science Abstracts, Section B—Electrical Engineering* at a reduced price, by arrangement with the Treasurer.

2. *The Physical Review* shall not be sent to newly elected fellows or members until the Managing Editor shall have received notice from the Treasurer that the dues have been paid.

## ARTICLE VII—Committees

The terms of office of all committees appointed by vote of the Council or of the Society, shall end on the January 1st next following the appointment, except upon special action of the Council continuing a committee.

## ARTICLE VIII—Amendments

These By-Laws may be amended or suspended only upon recommendation of the Council, and by a two-thirds vote of the fellows present at a meeting of the Society

# MEMBERSHIP LIST
## OF
# THE AMERICAN PHYSICAL SOCIETY
## JULY, 1926

---

### HONORARY MEMBERS

ARRHENIUS, SVANTE AUGUST, Dr. Phil., Juris et Med. Director of the Nobel Institute Experimentalfallet, *Stockholm, Sweden.*

BJERKNES, VILHELM FRIMENN KOREN, Dr. Ph. University of Christiania. Professor at the *Geophysical Institute, Bergen, Norway.*

BOHR, NIELS, Dr. Ph. Institute of Theoretical Physics. *Blegdamsveg, 15, Copenhagen, Denmark.*

BRAGG, WILLIAM HENRY, M.A. '87, Cambridge; D.Sc. '14, Manchester; D.Sc. '14, Brown; D.Sc. '19, Leeds. Davy Faraday Research Laboratory, The Royal Institution, *21 Albemarle Street, London, W. 1, England.*

LORENTZ, HENDRIK ANTOON, Dr. Phil., University of Leyden, Professor of Physics in the University of Leyden, *Julianastraat, 49, Haarlem, Netherlands.*

PLANCK, MAX, Dr. Phil., Professor of Theoretical Physics, University of Berlin, *Wangenheim Str. 21 Grunewald, Berlin, Germany.*

RUTHERFORD, SIR ERNEST, Kt., M.A., D.Sc., Ph.D. Cavendish Professor of Experimental Physics, University of Cambridge, *Newnham Cottage, Queen's Road, Cambridge, England.*

WIECHERT, EMIL, G.R.R. Institute fur Geophysik, *Herzberger Landstrasse, 180, Goettingen, Germany.*

### FELLOWS AND MEMBERS

NOTE: A name preceded by an asterisk (*) is that of a Fellow; all others are Members. Addresses are given as on record in the office of the Treasurer.

ABBEY, B. G. Hobart College, Geneva, N. Y.
ABBOTT, FRANK L. 825 South Ross St., Santa Ana, Calif.
ABBOTT, RAYMOND B. 339 Sylvia St., West Lafayette, Ind.
ABERNATHY, LEWIS G. 503 Linn Ave., Fayette, Mo.
ACKLEY, HUGH M. Western State Normal School, Kalamazoo, Mich.
*ADAMS, COMFORT A. Pierce Hall, Cambridge, Mass.
*ADAMS, EDWIN P. Princeton University, Princeton, N. J.
*ADAMS, ELLIOT Q. Nela Research Laboratory, Nela Park, Cleveland, Ohio.
ADAMS, JOHN MEAD, University of California, Southern Branch, Los Angeles, Calif.
*ADAMS, LEASON H. Geophysical Laboratory, Washington, D. C.
ADAMS, NORMAN I. Jr. Sloane Physics Laboratory, Yale University, New Haven, Conn.
ADAMSON, WILLIAM H. Houston State Teachers College, Huntsville, Tex.
AINSLIE, DONALD S. University of Western Ontario, London, Ont.
AIYAR, N. C. KRISHNA, University College, Rangoon, Burma.
AKELEY, EDWARD S. Ryerson Laboratory, University of Chicago, Chicago, Ill.
AKIHIRA, TAKEO, Institute of Physical, Chemical Research, Komagome, Hongo, Tokyo, Japan.

ALBERS, VERNON M. University of Illinois, Urbana, Ill.
ALBRIGHT, JOHN G. Sweet Briar College, Sweet Briar, Va.
ALBRIGHT, PENROSE S. 1502 East 9 Street, Winfield, Kan.
ALDERMAN, GEORGE W. 19 Lincoln Ave., Amherst, Mass.
ALEXANDER, LOWELL M. University of Cincinnati, Cincinnati, Ohio.
*ALEXANDERSON, ERNST F. W. General Electric Company, Schenectady, N. Y.
ALLEN, MILDRED, 88 Montview Street, West Roxbury, Mass.
*ALLEN, SAMUEL J. M. University of Cincinnati, Cincinnati, Ohio.
ALLIS, WILLIAM P. Massachusetts Institute of Technology, Cambridge, Mass.
ALLISON, FRED, Alabama Polytechnic Institute, Auburn, Ala.
ALLISON, SAMUEL K. University of California, Berkeley, Calif.
*ALMY, FRANK F. Grinnell College, Grinnell, Iowa.
*ALMY, JOHN EDWIN, University of Nebraska, Lincoln, Neb.
*ALTER, DINSMORE, University of Kansas, Lawrence, Kan.
ALTMAN, FRANCIS J. Via de Seminario, 120, Rome, Italy.
*AMES, JOSEPH S. Johns Hopkins University, Baltimore, Md.
*ANDEREGG, F. O. Mellon Institute, Pittsburgh, Pa.
ANDERSEN, ERIK, 2601 Logan Boulevard, Chicago, Ill.
ANDERSON, ELDA, Green Lake, Wis.
ANDERSON, EWALD, 1016 West 9th St., Los Angeles, Calif.
ANDERSON, S. HERBERT, University of Washington, Seattle, Wash.
*ANDERSON, JOHN A. Mt. Wilson Observatory, Pasadena, Calif.
ANDERSON, WILLIAM B. 310 North 26th St., Corvallis, Ore.
ANDRES, PAUL G. 541 Fourth Avenue, St. Charles, Ill.
ANDREWS, DONALD H. 158 South Main St., Southington, Conn.
ANDREWS, MARY R. Research Laboratory, General Electric Company, Schenectady, N. Y.
ANGELL, M. F. University of Idaho, Moscow, Idaho.
ANSLOW, GLADYS A. Smith College, Northampton, Mass.
APPLETON, EDWARD V. King's College, London, W. C. 2, England.
ARCHAMBO, FRANK C., JR. 2144 Wakeman St., Toledo, Ohio
ARMSTRONG, ALICE H. 52 Curve St., Waltham, Mass.
ARNOLD, ERIC A. University of Illinois, Urbana, Ill.
*ARNOLD, H. D. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
ARONBERG, LESTER, Ryerson Physical Laboratory, University of Chicago, Chicago, Ill.
ASHLEY, MURIEL F. Vassar College, Poughkeepsie, N. Y.
ASTER, ALVIN K. Bell Telephone Laboratories Inc., 463 West St., New York, N.Y.
ATKINSON, A. A. Ohio University, Athens, Ohio.
*AULT, J. P. 36th St. & Broad Branch Road, Washington, D. C.
*AUSTIN, LOUIS WINSLOW, Bureau of Standards, Washington, D. C.
AYLESWORTH, EVELYN, 2214 Dana St., Berkeley, Calif.
AYRES, H. D. 122 Edgerton Road, Akron, Ohio.

*BABCOCK, HAROLD D. Mt. Wilson Solar Observatory, Pasadena, Calif.
BACON, ARTHUR A. The American University of Beirut, 18 East 41 Street, New York, N.Y.
BACON, GEORGE P. 10 Bellevue Ave., Cambridge, Mass.
BAILEY, AUSTIN, 82 South St., Freehold, N. J.
BAILEY, EMMETT C. 1719 Eye St. N.W., Washington, D. C.
*BAIN, EDGAR C. Union Carbide and Carbon Research Laboratories, Inc., Long Island City, N. Y.

BAIR, W. H. 145 Andrews Place, West Lafayette, Ind.
BAKER, CARL I. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*BAKER, ROBERT H. University of Illinois Observatory, Urbana, Ill.
*BAKER, WILL C. 135 Centre St., Kingston, Ontario, Canada.
BALDERSTON, MARK, 826 Lafayette St., Easton, Pa.
BALDES, E. J. 803 Center St., West Rochester, Minn.
BALDWIN, ROLLIN S. Sloane Physics Laboratory, Yale University, New Haven, Conn.
BALL, ALBERT, Cooper Union, New York, N. Y.
BALL, JOSEPH A. 136 Marlboro St., Wollaston, Mass.
BALL, THOMAS F. Department of Physics, University of South Carolina, Columbia, S. C.
*BALLANTINE, STUART, 441 Locust Ave., Philadelphia, Pa.
BANCROFT, WILDER D. Cornell University, Ithaca, N. Y.
BANNING, KENDALL, 16 Gramercy Park, New York, N. Y.
BARBER, I. GARNETT, Western Electric Co., Hawthorne Station, Chicago, Ill.
BARBER, W. HARLEY, Ripon College, Ripon, Wis.
BARDIN, COLLIS M. Avon, N. Y.
*BARKER, H. C. University of Pennsylvania, Philadelphia, Pa.
*BARKER, ERNEST F. 1603 South University Ave., Ann Arbor, Mich.
BARNES, B. T. 1858 Haldane Road, Cleveland, Ohio.
BARNES, COLIN. University, Toronto, Canada.
*BARNES, H. T. McGill University, Montreal, Canada.
*BARNES, JAMES. Bryn Mawr College, Bryn Mawr, Pa.
*BARNETT, S. J. Norman Bridge Laboratory of Physics, Pasadena, Calif.
BARRY, FREDERICK M. Physics Building, Columbia University, New York, N.Y.
BARTLETT, RUSSELL S. 1562 Yale Station, New Haven, Conn.
BARTON, HENRY A. Jefferson Physical Laboratory, Harvard University, Cambridge, Mass.
BARTON, VOLA P. Linwood Ave., Station E, Baltimore, Md.
*BARUS, CARL. Brown University, Providence, R. I.
BASSETT, PRESTON R. 1730 East 23rd St., Brooklyn, N. Y.
*BATEMAN, HARRY. California Institute of Technology, Pasadena, Calif.
*BATES, FREDERICK J. Bureau of Standards, Washington, D. C.
BATES, H. CLIFFORD, Corning Glass Works, Corning, N. Y.
BAUDER, ARTHUR R. University of Alabama, University, Ala.
*BAUER, L. A. 301 The Ontario, Washington, D. C.
BAYLEY, PAUL L. University of Rochester, Rochester, N. Y.
*BAZZONI, CHARLES B. Randal Morgan Laboratory, University of Pennsylvania, Philadelphia, Pa.
*BEACH, FREDERICK E. Sloane Physical Laboratory, Yale University, New Haven, Conn.
BEAL, A. F. U. S. Public Health Service 16 Seventh St., Washington, D. C.
BEAMS, JESSE W. 1100 Wertland St., Charlottsville, Va.
BECKER, A. E. 252 Lincoln Ave., Elizabeth, N. J.
BECKER, ARTHUR L. Chosen Christian College, Seoul, Korea.
BECKER, GEORGE, Dumont, N. J.
BECKER, JOSEPH A. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
BECKNELL, GUY G. 6902 Dixon Ave., Tampa, Fla.
*BEDELL, FREDERICK, Cornell University, Ithaca, N. Y.
BEERS, ROLAND F. 113 Lake St., Arlington, Mass.
BEESE, NORMAN C. 2120 Michigan St., Toledo, Ohio.
BEGEMAN, HILDA, Wellesley College, Wellesley, Mass.

*Behrend, B. A. 110 Cliff Road, Wellesley Hills, Mass.
Bell, Harry A. Naval Proving Ground, Dahlgren, Va.
Bellamy, B. C. Laramie, Wyo.
Beller, William C. 51 East 123rd St., New York, N. Y.
Benade, J. M. Forman Christian College, Lahore, Punjab, India.
Bender, C. Ray, 2565 Fifth Ave., Sacramento, Calif.
Benedicks, Carl, Metallogr Institutet, Stockholm Va. Sweden.
Benioff, Hugo, 1295 East Villa St., Pasadena, Calif.
Bennett, A. H. Bureau of Standards, Div. 4, Washington, D. C.
Bennett, Donald M. Sterling Hall, University of Wisconsin, Madison, Wis.
Bennett, Clarence E. 17 Tyler St., Lakewood, R. I.
*Bennett, Edward, University of Wisconsin, Madison, Wis.
*Benton, J. R. University of the State of Florida, Gainesville, Fla.
Bichowsky, R. F. Johns Hopkins University, Baltimore, Md.
Biddle, James G. 1211 Arch St., Philadelphia, Pa.
*Bidwell, Charles C. 105 Valentine Place, Ithaca, N. Y.
*Bieler, Etienne S. McGill University, Montreal, Canada.
Billings, H. Louisa, Hatfield, Mass.
Bingham, M. Watson, Lake View Park, Asheville, N. C.
*Birge, Raymond T. University of California, Berkeley, Calif.
*Bishop, F. L. University of Pittsburgh, Pittsburgh, Pa.
Bishop, Fred M. Eastman Kodak Company, Rochester, N. Y.
Bishop, John B. Rockefeller Hall, Cornell University, Ithaca, N. Y.
Bitner, R. E. 53 Washington Square South, New York, N. Y.
Bitter, Francis T. Tibbett Ave. & 246th St., New York, N. Y.
Bjornson, B. G. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
Black, Newton H. 21 Follen St., Cambridge, Mass.
*Blackwell, Howard L. Harvard University, Cambridge, Mass.
Blackwood, Oswald, University of Pittsburgh, Pittsburgh, Pa.
*Blair, W. R. Staff School, Fort Leavenworth, Kan.
*Blake, Frederick C. Ohio State University, Columbus, Ohio.
Blake, Sue Avis, Bryn Mawr College, Merion Station, Pa.
*Blaker, Ernest, 224 Casterdon Ave., Akron, Ohio.
*Bliss, William J. A. Johns Hopkins University, Baltimore, Md.
Boardman, Leland J. Houghton College, Houghton, N. Y.
Bockstahler, Lester I. 101 Haven House, Evanston, Ill.
Boland, Robert S. Hygrade Lamp Company, Salem, Mass.
*Boltwood, Bertram B. Sloane Laboratory, Yale University, New Haven, Conn.
Boothroyd, Samuel L. Fuertes Laboratory, Cornell University, Ithaca, N. Y.
Bordner, Earl R. State College, State College, Pa.
Boreman, Robert W. Carnegie Institute of Technology, Pittsburgh, Pa.
*Bovie, W. T. Medical School of Harvard University, Boston, Mass.
*Bowen, Ira S. California Institute of Technology, Pasadena, Calif.
Bowie, Edward H. U. S. Weather Bureau, San Francisco, Calif.
*Bowie, William, U. S. Coast and Geodetic Survey, Washington, D. C.
Bowles, Edward L. Mass. Institute of Technology, Cambridge, Mass.
Bown, Ralph, 195 Broadway, New York, N. Y.
Boyce, Joseph C. Palmer Physical Laboratory, Princeton, N. J.
Boyer, Donald P. 804 Graham Road, Richmond, Va.
*Boyle, R. W. University of Alberta, Edmonton, Alberta, Canada.
*Boynton, William P. University of Oregon, Eugene, Ore.

BOZORTH, RICHARD M. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
BRACKETT, FREDERICK S. 2587 Buena Vista Way, Berkeley, Calif.
BRACKETT, WILLIAM R. Kansas State College, Manhattan, Kan.
BRADY, EDWARD J. 3101 Passyunk Ave., Philadelphia, Pa.
BRAININ, CLEMENT S. 14 Laurel Place, Glen Ridge, N. J.
BRAKEL, HENRY L. University of Washington, Seattle, Wash.
BRANT, LAURA C. Judson College, Marion, Ala.
BRASEFIELD, CHARLES J. Graduate College, Princeton University, N. J.
BRAUN, MILTON L. 27 Baptist Compound, Pao Shing Road, Shanghai, China.
BRECKENRIDGE, F. C. U. S. Lighthouse Depot, Staten Island, N. Y.
*BREIT, G. Dept. of Terrestrial Magnetism, Washington, D. C.
BRESLAUER, NATHANIEL P. 768 Maryland Ave., Milwaukee, Wis.
BREWER, A. KEITH, Norman Bridge Laboratory of Physics, California Institute of Technology, Pasadena, Calif.
BRICKWEDDE, FERDINAND G. 1128 East 36th St., Baltimore, Md.
*BRIDGMAN, P. W. Jefferson Physical Laboratory, Cambridge, Mass.
*BRIGGS, C. A. 1311 Spring Road, N. W., Washington, D. C.
BRIGGS, HOWARD B. University of Chicago, Chicago, Ill.
*BRIGGS, LYMAN J. Bureau of Standards, Washington, D. C.
BRIGHTMAN, CHARLES L. 852 Ackerman Ave., Syracuse, N. Y.
BRINSMADE, J. B. Williams College, Williamstown, Mass.
BROCK, HENRY M. Fairview, Concord Road, Weston, Mass.
BROCK, JAMES E. 1300 East 3rd Street, Bloomington, Ind.
BRODE, ROBERT B. California Institute of Technology, Pasadena, Calif.
BROMBACHER, W. G. 6314 Ridgewood Ave., Chevy Chase, Md.
BRONK, DETLEV W. 11 Ridge Way, Ann Arbor, Mich.
*BRONSON, HOWARD L. Dalhousie University, Halifax, Nova Scotia, Canada.
BROOK, GEORGE B. British Aluminum Co., Ltd. Adelaide House, King William St., London E. C., England.
*BROOKS, H. B. Bureau of Standards, Washington, D. C.
BROWN, BEN E. Mountain Lakes, N. J.
BROWN, BENJAMIN H. Whitman College, Walla Walla, Washington.
*BROWN, FAY CLIFF, 3030 Newark St., Washington, D. C.
BROWN, FREDERICK L. P.O. Box 52, University, Va.
BROWN, H. A. British Embassy, Washington, D. C.
BROWN, HUGH M. 1923 Russell St., Berkeley, Calif.
BROWN, J. A. American University, Beirut, Syria.
BROWN, JOSEPH G. Stanford University, Palo Alto, Calif.
BROWN, S. LEROY, University of Texas, Austin, Tex.
BROWN, T. B. George Washington University, Washington, D. C.
BROWN, W. BYRON, Emory, Va.
BROWN, WILLIAM G. Mass. Institute of Technology, Cambridge, Mass.
BROXON, JAMES W. University of Colorado, Boulder, Colo.
*BRUSH, CHARLES F. 3752 Euclid Ave., Cleveland, Ohio.
BRUSH, C. F. JR. 3701 Euclid Ave., Cleveland, Ohio.
BRYAN, A. B. The Rice Institute, Houston, Tex.
*BRYANT, ERNEST C. Middlebury College, Middlebury, Vt.
BUBB, FRANK W. Ryerson Laboratory, University of Chicago, Chicago, Ill.
*BUCHERER, ALFRED H. Bonn-am-Rhein, Immenburg, Germany.
BUCHHEIM, WALTER A. 1277 South Lincoln St., Denver, Colo.
BUCHTA, J. WILLIAM, University of Minnesota, Minneapolis, Minn.

*Buckingham, Edgar, Bureau of Standards, Washington, D. C.
*Buckley, Oliver E. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
Bungartz, Everhard, I. G. Farbenindustrie Aktiengesellschaft, Griesheim a/M, Germany.
*Burgess, George K. Bureau of Standards, Washington, D. C.
Burka, Samuel M. McCook Field, Dayton, Ohio.
Burnett, Mrs. Earle S. R. 5, Box 45, Fort Worth, Tex.
Burns, John F. Sterling Hall, University of Wisconsin, Madison, Wis.
*Burns, Keivin, Alleghany Observatory, N. S., Pittsburgh, Pa.
Burt, Robert C. California Institute of Technology, Pasadena, Calif.
*Burton, E. F. University of Toronto, Toronto, Canada.
Busse, Johanna, Bureau of Standards, Washington, D. C.
Butler, L. W. Iowa State College, Ames, Iowa.
*Bush, Vannevar, Mass. Institute of Technology, Cambridge, Mass.
Butts, Donald C. A. 4402 Walnut St., Philadelphia, Pa.
Byerly, Perry, Jr. University of California, Berkeley, Calif.

Cady, Francis E. Nela Park, Cleveland, Ohio.
*Cady, Walter G. Wesleyan University, Middletown, Conn.
*Campbell, George A. Amer. Tel. and Tel. Co., 195 Broadway, New York, N. Y.
*Campbell, Leslie L. Simmons College, Boston, Mass.
Cardwell, Alvin B. Sterling Hall, University of Wisconsin, Madison, Wis.
*Carman, Albert P. University of Illinois, Urbana, Ill.
Carr, Maurice L. Avon, Ill.
Carragan, G. Howard, Rensselaer Polytechnic Institute, Troy, N. Y.
Carroll, John A. Sidney Sussex College, Cambridge, England.
Carter, Charles W. Room 1531, 195 Broadway, New York, N. Y.
*Carter, Edna, Vassar College, Poughkeepsie, N. Y.
*Cartmel, William B. 561 La Salle Road, Verdun, Montreal, Canada.
*Carty, John J. 195 Broadway, New York, N. Y.
Carver, E. K. 215 Flower City Park, Rochester, N. Y.
Case, Nelson P. 659 Forest Ave., Palo Alto, Calif.
Case, Theodore W. Case Research Laboratory, Auburn, N. Y.
Castleman, R. A. Jr. Box 107, East Falls Church, Va.
Caswell, A. E. 1960 University St., Eugene, Ore.
Cha, Chien, Southeastern University, Nanking, China.
*Chaffee, E. L. 32 Curney St., Cambridge, Mass.
*Chamberlain, Clark W. Granville, Ohio.
Chaney, N. K. Research Laboratories, National Carbon Co., Inc., Cleveland, Ohio.
Chang, Z. T. 49 Wendell St., Cambridge 38, Mass.
*Chant, Clarence A. University of Toronto, Toronto, Canada.
Chao, S. H. St. John's University, Shanghai, China.
Chapman, Charles W. Michigan State College, East Lansing, Mich.
Chapman, Edgar K. Wabash College, Crawfordsville, Ind.
Chappell, R. R. 2112 East Clay St., Richmond, Va.
Charles, Rollin L. 510 Race Ave., Lancaster, Pa.
Chase, Mabel A. Mt. Holyoke College, So. Hadley, Mass.
Cheney, Elliott W. Middlebury College, Middlebury, Vt.
*Cheney, Walter L. Bureau of Standards, Washington, D. C.
Chestnut, Roy W. 30½ Irving St., Montclair, N. J.

*Child, Clement D. Colgate University, Hamilton, N. Y.
Childs, Herbert R. Rockefeller Hall, Cornell University, Ithaca, N. Y.
Christie, Malcolm G. British Embassy, Washington, D. C.
Chu, C. T. Soochow University, Soochow, China.
Chylinski, Stanislas, 49 Hitchcock Hall, University of Chicago, Chicago, Ill.
Cioffi, Paul, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*Clark, Mrs. Admont. c/o W. H. Howell, Johns Hopkins School of Hygiene, Baltimore, Md.
*Clark, Arthur L. Queen's University, Kingston, Ontario, Canada.
*Clark, Bertha May, Newtown, Buck's County, Pa.
Clark, Frank M. General Electric Co., 5 Boylston St., Pittsfield, Mass.
Clark, George L. Research Laboratory of Applied Chemistry, Massachusetts Institute of Technology, Cambridge, Mass.
Clark, Harry, Rockefeller Institute, 66th St. and Avenue A, New York, N. Y.
Clark, Herbert A., Taylor Instrument Company, Rochester, N. Y.
Clark, L. B. 1310 Milvia St., Berkeley, Calif.
Clark, Loren T. University of Southern California, Los Angeles, Calif.
Clarke, John L. 124 44th Ave., Lachine, Quebec, Canada.
Clift, Evelyn O. Mount Holyoke College, South Hadley, Mass.
Clo, J. H. 470 Vanderbilt Ave., Brooklyn, N. Y.
Clokey, Allison A. 27 Sunderland Ave., Rutherford, N. J.
Cloyd, Annie, 1754 North Holyoke Ave., Wichita, Kan.
*Coblentz, William W. Bureau of Standards, Washington, D. C.
Coggins, C. L. R. I. State College, Kingston, R. I.
*Cohen, Louis, 3100 Connecticut Ave., Washington, D. C.
Cohen, Samuel, c/o General Instrument Corp., 477 Broadway, New York, N. Y.
*Colby, Walter F. 322 North State St., Ann Arbor, Mich.
*Cole, Alfred D. Ohio State University, Columbus, Ohio.
Coleman, James B. University of South Carolina, Columbia, S. C.
Collins, E. Hobart, University of Iowa, Iowa City, Iowa.
Collins, Gyfford D. 16 Vandeventer Ave., Princeton, N. J.
Collins, J. R. Rockefeller Hall, Ithaca, N. Y.
*Colpitts, E. H. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
Colwell, Robert C. 332 Demain Ave., Morgantown, W. Va.
*Compton, Arthur, University of Chicago, Chicago, Ill.
*Compton, Karl T. 106 Fitz-Randolph Road, Princeton, N. J.
*Comstock, Daniel F. 1070 Beacon St., Brookline, Mass.
Concilio, August, 447 Vine St., Bethlehem, Pa.
Condon, Edward, c/o Institut für Theoretische Physik, Göttingen, Germany.
Cook, David L. General Delivery, Madison, S. D.
Cook, J. W. 1016 El Centro Ave., El Centro, Calif.
Cook, Rolla V. Bethany College, Bethany, W. Va.
*Cook, S. R. Office of Librarian, College of the Pacific, Stockton, Calif.
*Cooke, H. L. 148 Mercer St., Princeton, N. J.
Cooke, T. F. 618 Delaware Ave., Buffalo, N. Y.
*Cooksey, Charlton D. 104 Huntington St., New Haven, Conn.
Cooksey, Donald, 311 St. Ronan St., New Haven, Conn.
Cooley, J. P. University of Michigan, Ann Arbor, Mich.
Coolidge, Albert S. South Mountain, Pittsfield, Mass.
*Coolidge, William D. General Electric Co., Schenectady, N. Y.
Coons, Clarence D. Denison University, Granville, Ohio.
Cooper, Frank L. Sheffield Scientific School, Yale, New Haven, Conn.

COPE, THOMAS D. University of Pennsylvania, Philadelphia, Pa.
CORBY, ALONZO F., JR. Lafayette College, Easton, Pa.
CORCUERA, A. LEYNES, University of the Philippines, Manila, P. I.
CORK, JAMES M. 1034 East Huron St., Ann Arbor, Mich.
CORNELIUS, DAVID W. University of Chattanooga, Chattanooga, Tenn.
CORCORAN, CHARLES A. College of the City of New York, N. Y.
CORNOG, I. CLYDE, University of Pennsylvania, Philadelphia, Pa.
COULLIETTE, J. H. Columbia University, New York, N. Y.
*COULSON, JOHN, Westinghouse Electric Company, Swissvale, Pa.
COX, RICHARDT T. New York University, University Heights, New York, N. Y.
CRAIG, PALMER H. 3401 Glenmore Ave., Cincinnati, Ohio.
CRAIGHEAD, JAMES R. General Electric Company, Schenectady, N. Y.
CRANDALL, IRVING B. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
CRAVATH, AUSTIN M. University of California, Berkeley, Calif.
*CRAWFORD, MORRIS B. Wesleyan University, Middletown, Conn.
CRAWFORD, PERRY O. The California Oregon Power Co., Medford, Ore.
CREAGER, PAUL S. Rutgers University, New Brunswick, N. J.
CREAGMILE, WILLIAM B. c/o J. G. Biddle, 1211 Arch St., Philadelphia, Pa.
*CREHORE, ALBERT C. 15924 Euclid Ave., Cleveland, Ohio.
*CREIGHTON, E. E. 1069 Wendell Ave., Schenectady, N. Y.
*CREW, HENRY, Northwestern University, Evanston, Ill.
CREW, WILLIAM H. Naval Research Laboratory, Bellevue, Anacostia, D. C.
CRITES, JAMES EDWARD, JR. Pennsylvania State College, State College, Pa.
*CRITTENDEN, EUGENE C. Bureau of Standards, Washington, D. C.
CROFUTT, CHARLES B. University of Maine, Orono, Me.
CROOK, LOUIS H. Catholic University of America, Washington, D. C.
CROOKER, SYLVAN J. 3312 19th St., N.W., Washington, D. C.
CROUP, ALFRED H. Swarthmore College, Swarthmore, Pa.
CROZIER, WILLIAM D. University of Iowa, Iowa City, Iowa.
CULLEN, CALEB G. 411 S. Kentucky Ave., Roswell, N. Mex.
CUMMINGS, HERBERT K. 4213 Ellicott St., Washington, D. C.
CUMMINGS, N. WILLARD, California Institute of Technology, Pasadena, Calif.
CUNNINGHAM, FREDERICK W. Mass. Institute of Technology, Cambridge, Mass.
*CURTIS, HARVEY L. Bureau of Standards, Washington, D. C.
CURTISS, L. F. Bureau of Standards, Washington, D. C.

*DADOURIAN, HAROUTENE, 125 Vernon St., Hartford, Conn.
DAGHLIAN, G. K. Connecticut College, New London, Conn.
DAHM, THOMAS M. University of Idaho, Moscow, Idaho.
DALTON, PHILIP, Glass Technology Laboratory, 1133 East 152 St., Cleveland, Ohio.
DANA, LEO I. 169 Chandler St., Buffalo, N. Y.
DARNELL, CARL, Victor X-Ray Corporation, 236 Robey St., Chicago, Ill.
DARNELL, RICHARD C. 209 East Park, Champaign, Ill.
*DARROW, KARL K. 610 West 111th St., New York, N. Y.
*DARWIN, CHARLES G. The University, Edinburgh, Scotland.
DAUGHERTY, J. FENTON, P.O. Box 812, Chapel Hill, N. C.
DAUGHERTY, JOHN H., JR. Steele Hall, Syracuse University, Syracuse, N. Y.
*DAVEY, WHEELER P. Pennsylvania State College, State College, Pa.
DAVID, JOHN A. Adelphi College, Brooklyn, N. Y.
*DAVIDSON, J. G. University of British Columbia, Vancouver, B. C.
DAVIDSON, WARD F. 360 Pearl St., Brooklyn, N. Y.

*Davis, Bergen, Columbia University, New York, N. Y.
Davis, George E. Iowa State College, Ames, Iowa.
Davis, Grace E. Wellesley College, Wellesley, Mass.
*Davis, Harvey N. 221 Pierce Hall, Cambridge, Mass.
Davis, John W. 125 Elderado St., Syracuse, N. Y.
Davis, Myrl N. Sterling Hall, University of Wisconsin, Madison, Wis.
*Davisson, C. J. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
Dawes, Henry F. McMaster University, Toronto, Canada.
*Day, Arthur L. Geophysical Laboratory, Washington, D. C.
Day, Frank H. Royal Military College, Kingston, Ontario, Canada.
*Day, William S. 220 Hobart Ave., cor. Beaver Road, Summit, N. J.
Deagan, John C. 1770 Berteau Ave., Chicago, Ill.
Dean, Charles E. 202 East Lafayette Ave., Baltimore, Md.
*De Broglie, M. Le Duc, 29 Rue Chateaubriand, Paris, France.
Defandorf, Francis M. Bureau of Standards, Washington, D. C.
De Foe, Ona K. Swedeborg, Mo.
De Graaff, A. Philips' Glowlampworks, Ltd., Eindhoven, Holland.
Delaney, J. P. 30 West 16th St., New York, N. Y.
*Dellinger, J. Howard, Bureau of Standards, Washington, D. C.
Del Rosario, Gasimiro, Yale University, New Haven, Conn.
Demaree, Ralph G. Route 2, Box 556, Pasadena, Calif.
Demarest, Charles S. 195 Broadway, New York, N. Y.
*Dempster, Arthur J. Ryerson Physical Laboratory, University of Chicago, Ill.
Deppermann, Charles E. Philippine Weather Bureau, Manila, Philippine Islands.
Dershem, Elmer, University of California, Berkeley, Calif.
*Dickinson, Hobart C. Bureau of Standards, Washington, D. C.
Dickson, J. B. 36 Butler Place, Northampton, Mass.
Dieterich, E. O. Development Dept., B. F. Goodrich Co., Akron, Ohio.
Dike, P. H. 252 High St., Philadelphia, Pa.
Dingee, Alexander L. M. Mass. Institute of Technology, Cambridge, Mass.
Dittmer, Arthur F. 73 Graduate College, Princeton, N. J.
Ditto, R. C. 231 Philadelphia Ave., Alma, Mich.
Doan, Richard L. Ryerson Laboratory, University of Chicago, Chicago, Ill.
Dobson, George, R.F.D. 1, Passaic, N. J.
Dobson, Percy, Hydro-Electric Power Commission, 8 Strachan Ave., Toronto 2, Ontario, Canada.
Dodd, L. E. 724 North Normandie Ave., Los Angeles, Calif.
*Dodge, Homer L. University of Oklahoma, Norman, Okla.
Doermann, Frederick W. New York University, University Heights, New York, N. Y.
Donle, H. P. Connecticut Telephone and Telegraph Co., Meriden, Conn.
Doolittle, J. W. 326 West Forest Ave., Wheaton, Ill.
*Dorsey, H. G. 1 Essex Ave., Gloucester, Mass.
*Dorsey, N. Ernest, c/o National Research Council, 21st and B Sts., Washington, D. C.
Dostal, Bernard, 1318 Forest Court, Ann Arbor, Mich.
*Doubt, Thomas E. Armour Institute of Technology, Chicago, Ill.
Douglas, James M. Davidson College, Davidson, N. C.
Douglas, John F. H. Marquette University, Milwaukee, Wis.
Dowling, Philip H. Sloane Laboratory, Yale University, New Haven, Conn.
Downey, K. Melvina, Wheaton, Minn.
Dozier, Charles T. P.O. Box 163, Reading, Calif.

DRAKE, FREDERICK H. 303 Mt. Auburn St., Watertown, Mass.
DREW, E. R. 132 Waverley St., Palo Alto, Calif.
DRYDEN, HUGH L. 2020 Pierce Mill Road, N.W., Washington, D. C.
DUANE, ARTHUR R. 1500 University Ave., S. E., Minneapolis, Minn.
*DUANE, WILLIAM, 695 Huntington Ave., Boston, Mass.
DU BRIDGE, LEE ALVIN, California Institute of Technology Pasadena, Calif.
DUDLEY, HOMER W. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*DUFF, A. WILMER, Worcester Polytechnic Institute, Worcester, Mass.
DUFFENDACH, O. STANLEY, 1218 Willard St., Ann Arbor, Mich.
DUFFORD, R. T. University of Missouri, Columbia, Mo.
DU MOND, JESSE W. M. 615 South Mentor St., Pasadena, Calif.
DUNCAN, D. C. 107 W. Fairmount Ave., State College, Pa.
DUNCAN, JAMES A.. Research Bureau, Brooklyn Edison Company, Brooklyn, N. Y.
DUNCAN, ROBERT C. Bureau of Ordnance, Navy Department, Washington, D. C.
DUNCAN, R. W. University of Pennsylvania, Philadelphia, Pa.
DUNHAM, J. LAWRENCE, 80 Perkins Hall, Cambridge, Mass.
DUNN, H. KENNETH, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
DU NOUY, RENE LECOMTE, Rockefeller Institute, 66th St. and Avenue A, New York, N. Y.
DURBIN, FRANK M. 511 South Florence St., Kirksville, Mo.
*DUSHMAN, SAUL, Research Laboratory, General Electric Company, Schenectady, N. Y.
DUTCHER, JOHN B. University of Indiana, Bloomington, Ind.
DYMOND, E. GILBERT, St. John's College, Cambridge, England.
DYSART, P. M. Pittsburgh Central High School, Pittsburgh, Pa.
DWIGHT, CHARLES H. University of Cincinnati, Cincinnati, Ohio.

*EARHART, ROBERT F. Ohio State University, Columbus, Ohio.
EASTHAM, MELVILLE, 30 State St., Cambridge, Mass.
EATON, DURWARD L. Indiana Central College, Indianapolis, Ind.
EATON, HERBERT N. c/o W. A. Baum Co., Inc., 100 Fifth Ave., New York, N. Y.
ECKART, CARL H. 3411 Park Ave., St. Louis, Mo.
ECKELS, CHARLES K. Sterling Hall, University of Wisconsin, Madison, Wis.
*ECKHARDT, ENGELHARDT A. Marland Oil Company, Ponca City, Okla.
*EDMUNDS, CHARLES K. Johns Hopkins University, Baltimore, Md.
EDWARDS, CHARLES W. Trinity College, Durham, N. C.
EDWARDS, HIRAM W. Southern Branch, University of California, Los Angeles, Calif.
EDWARDS, PAUL G. Room 1707, 195 Broadway, New York, N. Y.
EDWARDS, PRESTON H. Winthrop College, Rock Hill, S. C.
EDWARDS, RAY L. Miami College, Oxford, Ohio.
EGLIN, JAMES M. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
ELDER, E. WAITE, East High School, Denver, Colo.
ELDRIDGE, JOHN A. 415 South Summit St., Iowa City, Iowa.
ELLETT, ALEXANDER, State University of Iowa, Iowa City, Iowa.
ELLIOTT, DANIEL S. Tulane University, New Orleans, La.
ELLIS, A. LEROY, 11 Banks Road, Swampscott, Mass.
ELLIS, JAMES H. Glendora, Calif.
ELLIS, JOSEPH W. 855 North Vermont Ave., Los Angeles, Calif.
ELLIS, WILLIAM G. 4549 Morris St., Germantown, Pa.
ELLMORE, W. AUSTIN, 1716 Juneway Terrace, Chicago, Ill.

EMELÉUS, K. GEORGE, Kings College, Strand, London, W.C.2. England.
ENGLUND, CARL R. 54 Court St., Freehold, N. J.
EPPLEY, MARION, 12 Sheffield Ave., Newport, R. I.
*EPSTEIN, PAUL S. California Institute of Technology, Pasadena, Calif.
ERF, HERBERT A. 2027 Cornell Road, Cleveland, Ohio.
*ERIKSON, HENRY A. University of Minnesota, Minneapolis, Minn.
ESMAKER, JOHN B. St. Ignatius High School, 1076 Roosevelt Road, Chicago, Ill.
ESTEY, ROGER S. Washington Square College, Washington Square, New York, N. Y.
*EVANS, GRIFFITH C. Rice Institute, Houston, Tex.
EVANS, R. D. Research Laboratory, Goodyear Tire and Rubber Co., Akron, Ohio.
*EVE, A. S. McGill University, Montreal, Canada.
*EWELL, ARTHUR W. Worcester Polytechnic Institute, Worcester, Mass.
EWING, SCOTT, Bureau of Standards, Washington, D. C.
EYRING, CARL F. Brigham Young University, Provo, Utah.

*FACCIOLI, G. General Electric Company, Pittsfield, Mass.
FAILLA, GIOACCHINO, Riverdale-on-Hudson, N. Y.
FAIRBANKS, FLOYD C. University of Rochester, Rochester, N. Y.
*FAIRCHILD, C. O. Bureau of Standards, Washington, D. C.
FANG, K. C. Norman Bridge Laboratory, California Institute of Technology, Pasadena, Calif.
FANT, A. T. Maple Street, Clinton, S. C.
FARNSWORTH, H. E. Brown University, Providence, R. I.
FARWELL, HERMON W. Columbia University, New York, N. Y.
FAZEL, CHARLES S. Atmospheric Nitrogen Corp., Syracuse, N. Y.
FEARING, JUSTIN L. 31 Milk St., Boston, Mass.
FEILD, ALEXANDER L. c/o United Alloy Steel Corporation, Canton, Ohio.
FENN, IRWIN H. 99 Livingston St., Brooklyn, N. Y.
*FENNER, CLARENCE N. Geophysical Laboratory, Carnegie Institution, Washington, D. C.
FERGUSON, C. V. General Electric Company, Schenectady, N. Y.
FERGUSON, F. A. Connecticut State College, Storrs, Conn.
FERGUSON, JOHN G. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
FERGUSON, W. F. C. New York University, Washington Square, New York, N. Y.
FERNER, ROY Y. Room 1127 Investment Bldg., Washington, D. C.
*FERRARI, EMILIO, RO. Laboratorio de Precijione, Via Marjalo 106, Rome, Italy.
*FERRY, ERVIN S. Purdue University, Lafayette, Ind.
FIDELIS, SISTER MARY, Rosary College, River Forest, Ill.
FIELD, ROBERT F. 104 Church St., Watertown, Mass.
FINCH, W. G. H. 286 East 206th St., New York, N. Y.
FINCK, J. LOUIS, Bureau of Standards, Washington, D. C.
FIREMAN, PETER, P.O. Box 434, Trenton, N. J.
FIRESTONE, FLOYD A. 153 New Physics Building, Ann Arbor, Mich.
*FISHER, WILLARD J. 49 Langdon St., Cambridge, Mass.
FITCH, A. L. University of Maine, Orono, Me.
*FLEMING, JOHN A. 36th and Broad Branch Road, Washington, D. C.
FLANDERS, PAUL B. 28 Prospect St., East Orange, N. J.
*FLETCHER, HARVEY, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*FLOWERS, ALAN E. The De Laval Separator Company, Poughkeepsie, N. Y.
*FOLEY, A. L. University of Indiana, Bloomington, Ind.

*Foote, Paul D. Bureau of Standards, Washington, D. C.
Forbes, Alexander, Harvard Medical School, Boston, Mass.
Forman, Alexander, West Virginia University, Morgantown, W. Va.
*Forsythe, W. E. Nela Research Laboratory, Cleveland, Ohio.
Fossum, Peter E. St. Olaf College, Northfield, Minn.
Foster, Donald D. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*Foster, John S. McGill University, Montreal, Canada.
Foster, Willena, University of Western Ontario, London, Ontario.
*Found, Clifton G. Research Laboratory, General Electric Company, Schenectady, N. Y.
Fountain, C. R. Peabody College, Nashville, Tenn.
Fox, Harold E. National Electric Mfg. Co., Pittsburgh, Pa.
Fox, John E. Western State Normal School, Kalamazoo, Mich.
*Fox, William, College of the City of New York, New York, N. Y.
Fraim, Parke B. Brooklyn Polytechnic Institute, Brooklyn, N. Y.
Frame, Floyd H. Box 531, Rolla, Mo.
Frank, H. C. Stevens Institute of Technology, Hoboken, N. J.
Frank, Nathaniel H. Mass. Institute of Technology, Cambridge, Mass.
*Franklin, William S. Mass. Institute of Technology, Cambridge, Mass.
Frantz, Samuel G. 1 Rue Newton, Paris XVI$^{\text{ieme}}$, France.
Frayne, John G. Antioch College, Yellow Springs, Ohio.
Frazier, Mildred Lucile, 527 South Birch St., Santa Ana, Calif.
Frederick, H. A. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
Free, E. E. 175 Fifth Ave., New York, N. Y.
Freed, Joseph D. R. 912 Fifth Ave., New York, N. Y.
Frehafer, Mabel K. Catherine Hooper Hall, Goucher College, Baltimore, Md.
Friauf, James B. Carnegie Institute of Technology, Pittsburgh, Pa.
Fricke, Hugo, Cleveland Clinic Foundation, Euclid Ave. and E. 93 St., Cleveland, Ohio.
Fritts, E. C., Jr. Eastman Kodak Company, 343 State St., Rochester, N. Y.
Fry, Howard M. 509 State St., Lancaster, Pa.
*Fry, Thornton C. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
Fukushima, Iwao, Physical Laboratory, University of Minnesota, Minneapolis, Minn.
*Fulcher, Gordon S. Corning Glass Works, Corning, N. Y.
Fuller, Leonard F. 1555 Cowper Street, Palo Alto, Calif.
Fullmer, Irwin H. 107 Westmoreland Ave., Takoma Park, Washington, D. C.
Fulweiler, W. H. 319 Arch St., Philadelphia, Pa.
Fussler, K. H. University of North Dakota, University, N. D.

Gaehr, Paul F. Wells College, Aurora, N. Y.
Gage, Henry Phelps, Corning Glass Works, Corning, N. Y.
Gage, O. Amsden, 115 Steuben St., Painted Post, N. Y.
Gaines, Newton, Texas Christian University, Fort Worth, Tex.
Galajikian, A. S. 217 North Third Ave., Maywood, Ill.
*Gale, Henry G. University of Chicago, Chicago, Ill.
Galle-Shohat, N. W. 509 Thompson St., Ann Arbor, Mich.
Galt, Rogers H. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*Gardiner, I. C. University Club, Washington, D. C.

GARDNER, WILLARD, 696 East 4th Ave., Logan, Utah.
GASKILL, E. C. New Jersey Zinc Company, Palmerton, Pa.
*GATES, FANNY COOK, 417 West 114th St., New York, N. Y.
GEER, WILLIAM C. Building 25-E, B. F. Goodrich Company, Akron, Ohio.
GEIGER, PAUL H. 1361 Marlboro Ave., Wilkinsburg Br., Pittsburgh, Pa.
GEORGE, E. F. Texas Technological College, Lubbock, Tex.
GEORGE, R. H. 332 W. Thornell St., West Lafayette, Ind.
GERKE, ROSCOE H. U. S. Rubber Co., 58th St. and 11th Ave., New York, N. Y.
*GERMANN, FRANK E. E. University of Colorado, Boulder, Colo.
GERMER, LESTER H. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
GERMOND, HALLETT H. 2103 Monroe St., Madison, Wis.
GERNSBACK, HUGO, 233 Fulton St., New York, N. Y.
GIAUQUE, WILLIAM F. Gilman Hall, University of California, Berkeley, Calif.
*GIBBS, ROSWELL C. Rockefeller Hall, Ithaca, N. Y.
*GIBSON, G. E. Gilman Hall, University of California, Berkeley, Calif.
*GIBSON, K. S. Bureau of Standards, Washington, D. C.
GIDDINGS, GLENN W. Sterling Hall, University of Wisconsin, Madison, Wis.
GILBERT, GEORGE A. Loyola College, 1901 West 16th St., Los Angeles, Calif.
GILBERT, JOHN J. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*GILBERT, NORMAN E. Dartmouth College, Hanover, N. H.
GILCHRIST, LACHLAN, University of Toronto, Toronto, Canada.
GILLEY, F. M. 21 John St., Chelsea, Mass.
GILMORE, L. H. California Institute of Technology, Pasadena, Calif.
GILROY, HELEN T. Canton Christian College, Canton, China.
*GISH, O. H. Dept. of Terrestrial Magnetism, Washington, D. C.
GLASOE, G. NORRIS, Sterling Hall, Madison, Wis.
GLENN, E. R. 425 West 123rd St., New York, N. Y.
GLENTZER, KENNETH, Illinois Bell Telephone Company, 212 West Washington St., Chicago, Ill.
GLIDDON, GORDON H. Rochester School of Optometry, 38 South Washington St., Rochester, N. Y.
GLOCKLER, GEORGE, California Institute of Technology, Pasadena, Calif.
GODDARD, ROBERT H. Clark University, Worcester, Mass.
GODFREY, T. B. Sterling Hall, University of Wisconsin, Madison, Wis.
GODFREY, WILLIAM E. Clemson College, Clemson College, S. C.
GOLDBERG, MAXIMILIAN M. 628 Plymouth Ave., Dayton, Ohio.
*GOLDEN, ASHER, 945 Hoe Ave., New York, N. Y.
*GOLDSMITH, ALFRED N. College of the City of New York, New York, N. Y.
GOODALE, JEANNETTE A., 2943 Gladstone Ave., Detroit, Mich.
*GOODSPEED, ARTHUR W. University of Pennsylvania, Philadelphia, Pa.
*GOODWIN, H. M. Mass. Institute of Technology, Cambridge, Mass.
GOODWIN, W. N. JR. Weston Electrical Instrument Company, Newark, N. J.
*GORDON, C. MCCHEYNE, Lafayette College, Easton, Pa.
GORTON, F. R. Ypsilanti, Mich.
GORTON, WILLIAM S. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
GOWDY, ROBERT C. University of Cincinnati, Cincinnati, Ohio.
GRABER, MYRON E. Morningside College, Sioux City, Iowa.
GRANATH, LOUIS P. University of Minnesota, Minneapolis, Minn.
GRANT, ROYAL E. 27 High St., Derry, N. H.
GRANTHAM, G. E. Post Graduate School, U. S. Naval Academy, Annapolis, Md.

*Gray, Arthur W. 3 Wahnetah Drive, Bound Brook, N. J.
Gray, G. Francis, P.O. Box 417, Poughkeepsie, N. Y.
*Gray, J. A. Queen's University, Kingston, Ontario, Canada.
Gray, Frank. 896 West End Ave., New York, N. Y.
Grebe, John Josef, The Dow Chemical Company, Midland, Mich.
Green, Jerome B. Jefferson Physical Laboratory, Harvard University, Cambridge, Mass.
Green, Warren K. Amherst College, Amherst, Mass.
Greene, Clarence W. Albany College, Albany, Ore.
Greenlaw, Frank M. Rogers High School, Newport, R. I.
Greenlees, A. Lloyd, Rutgers University, New Brunswick, N. J.
Greenslade, G. R. 334 Melwood St., Oakland Station, Pittsburgh, Pa.
Grisewood, Edgar N. Washington Square College, Washington Square, New York, N. Y.
*Grondahl, L. O. Union Switch and Signal Company, Swissvale, Pa.
Gross, Joseph E. 1423 La Clair St., Swissvale, Pa.
*Grover, Frederick W. 110 University Place, Schenectady, N. Y.
Grubb, A. A. 69 Parkwood Boulevard, Mansfield, Ohio.
Grzybowski, John M. Research Laboratory, Westinghouse Electric and Manufacturing Company, East Pittsburgh, Pa.
Guillemin, Victor, Jr. North Milwaukee, Wis.
Gurney, Lawrence E. P.O. Box 76, Station W, New York, N. Y.
Guthrie, Vernon, Southwestern University, Georgetown, Tex.
Guyer, Edwin M. C. 138 Prospect Ave., Madison, Wis.
Gwinn, Ira J. Morningside College, Sioux City, Iowa.

Haberly, Adolph A. Box 38, Edgerton, Kan.
*Hackett, Felix E. Royal College of Science, Dublin, Ireland.
Hagen, Rowland V. 2754 Prairie Ave., Evanston, Ill.
Hagenow, Charles F. Washington University, St. Louis, Mo.
Haigis, Carlton B. Victor Talking Machine Company, Camden, N. J.
Hake, J. W. State Teachers College, Maryville, Mo.
Hale, C. F. N. Y. State College for Teachers, Albany, N. Y.
*Hale, George E. Mt. Wilson Observatory, Pasadena, Calif.
Hales, Wayne B. 2621 Van Buren Ave., Ogden, Utah.
*Hall, Edwin H. Harvard University, Cambridge, Mass.
*Hall, Elmer E. University of California, Berkeley, Calif.
Hall, Vincent Cecil, Eastman Kodak Company, Kodak Park, Rochester, N. Y.
*Ham, Frank W. Montana State College, Bozeman, Mont.
Ham, Lloyd B. New York University, Washington Square East, New York, N. Y.
Ham, William R. Pennsylvania State College, State College, Pa.
Hamer, Richard, 3362 Beechwood Blvd., Squirrel Hill, Pittsburgh, Pa.
Hamilton, John O. Kansas State Agricultural College, Manhattan, Kan.
*Hammer, William J. Hotel Earle, 103 Waverly Place, New York, N. Y.
Hammond, H. E., University of Missouri, Columbia, Mo.
Hammond, John H., Jr. Hammond Radio Laboratory, Gloucester, Mass.
Hammond, Philo F. University of Wyoming, Laramie, Wyo.
Hanawalt, J. Donald, Sterling Hall, University of Wisconsin, Madison, Wis.
Hanson, C. F. 191 Warburton Ave., Yonkers, N. Y.
Hardy, A. C. Mass. Institute of Technology, Cambridge, Mass.
*Harkins, William D. University of Chicago, Chicago, Ill.
Hargitt, Thomas F. 403 Seminary Ave., Bloomington, Ill.

HARKER, WILLIAM J. Sterling Hall, University of Wisconsin, Madison, Wis.
HARKINS, M. R. University of Pennsylvania, Philadelphia, Pa.
HARNWELL, GAYLORD P. Graduate College, Princeton, N. J.
*HARPER, DANIEL R. General Engineering Laboratory, General Electric Company, Schenectady, N. Y.
*HARRINGTON, ELMER A. Bureau of Standards, Washington, D. C.
HARRINGTON, E. L. c/o University, Saskatoon, Saskatchewan, Canada.
HARRIS, ROSCOE E. Lake Forest College, Lake Forest, Ill.
HARRIS, SYLVAN, Radio Division, Stewart-Warner Speedometer Corp., 1826 Diversey Pkwy., Chicago, Ill.
HARRISON, GEORGE R. Box 1269, Stanford University, Calif.
HARRISON, JAMISON R. Box 338, Wesleyan University, Middletown, Conn.
HARRISON, T. R. The Brown Instrument Company, Philadelphia, Pa.
HARTIG, HENRY E. University of Minnesota, Engineering College, Minneapolis, Minn.
HARTLEY, KENNETH, 320 Webster Ave., Houston, Tex.
*HARTLEY, R. L. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*HARTMAN, LEON WILSON, University of Nevada, Reno, Nev.
HARTMANN, F. M. Cooper Union, New York, N. Y.
HARTSOUGH, R. C. 3425 Maple Ave., Berwyn, Ill.
HARVIN, GLENN B. 108 Waldron St., Lafayette, Ind.
HASEMAN, W. P. 1531 West 32nd St., Oklahoma City, Okla.
HASTINGS, A. BAIRD, Rockefeller Institute, 66th St. and Ave. A, New York, N. Y.
*HASTINGS, CHARLES S. Sheffield Scientific School, New Haven, Conn.
HATLEY, CHARLES C. Trinity College, Durham, N. C.
HAUSEMANN, ERICK, Brooklyn Polytechnic Institute, Brooklyn, N. Y.
HAVIGHURST, ROBERT J. Jefferson Physical Laboratory, Harvard University, Cambridge, Mass.
HAY, DONALD L. 1304 Regent St., Madison, Wis.
*HAYES, H. C. 3425 Porter St., N.W., Washington, D. C.
HAYNER, LUCY J. Research Laboratory, General Electric Company, Schenectady, N. Y.
HAYNES, FRED BROWN, Virginia Polytechnic Institute, Blacksburg, Va.
HAYNES, PIERRE E. Aurora Theatre Building, East Aurora, N. Y.
*HAZELTINE, L. A. 1024 Hudson St., Hoboken, N. J.
HAZEN, GRACE, 1636 Kenyon St., Washington, D. C.
*HEAPS, CLAUDE W. The Rice Institute, Houston, Tex.
HEATH, LESLIE O. 4901 Stenton Ave., Germantown, Pa.
HEATON, VINCENT E. 525 Ash Ave., Ames, Iowa.
*HEBB, T. C. University of British Columbia, Vancouver, B. C., Canada.
HECK, CHARLES M. State College, Raleigh, N. C.
HECTOR, LUTHER G. University of Buffalo, Buffalo, N. Y.
HEIL, HERMAN G. Ohio State University, Columbus, Ohio.
HEINDLHOFER, KALAMAN, 95 Woodruff Ave., Brooklyn, N. Y.
*HEISING, R. A. 2 Duncan St., Millburn, N. J.
HELMICK, P. S. 1306-28th St., Des Moines, Iowa.
HEMENWAY, LELAND D. 137 Langley Road, Newton Center, Mass.
HENDERSHOT, OTIS P. Steele Hall, Syracuse University, Syracuse, N. Y.
HENDERSON, CHARLES W. 504 University Place, Syracuse, N. Y.
HENDREN, L. L. University of Georgia, Athens, Ga.
*HENNINGS, A. E. University of British Columbia, Vancouver, B. C., Canada.
HENNY, G. C. 565 Heights Terrace, Portland, Ore.
HEPBURN, ANN B. Kelly Hall, University of Chicago, Chicago, Ill.

*Hering, Carl, 1317 Spruce St., Philadelphia, Pa.
*Hering, D. W. New York University, University Heights, New York, N. Y.
Herrick, Julia F. Rockford College, Rockford, Ill.
*Hersey, Mayo D. U. S. Bureau of Mines, Pittsburgh, Pa.
Hershman, Bernard, 305 Monroe St., Valparaiso, Ind.
*Hess, Victor F. Physikalisches Institut der Universität, Graz, Austria.
Hesthal, Cedric E. 483 Addison Ave., Palo Alto, Calif.
Hetle, Erik, 307 Manitau St., Northfield, Minn.
*Hewlett, Clarence W. Research Laboratory, General Electric Company, Schenectady, N. Y.
*Heyl, Paul R. Bureau of Standards, Washington, D. C.
*Heymans, Paul A. Mass. Institute of Technology, Cambridge, 39, Mass.
Hickman, C. N. 125-22nd St., Jackson Heights, Long Island, N. Y.
Hidnert, Peter, Bureau of Standards, Washington, D. C.
Hilberry, Norman, Ryerson Laboratory, University of Chicago, Chicago, Ill.
*Hildebrand, Joel H. Gilman Hall, University of California, Berkeley, Calif.
*Hill, Bruce V. Chicago Telephone Company, Chicago, Ill.
Hill, Charles F. Research Dept., Westinghouse Electric and Manufacturing Co., East Pittsburgh, Pa.
Hill, Edward L. University of Minnesota, Minneapolis, Minn.
Hill, Harry, Texas Technological College, Lubbock, Tex.
Hirashima, Kazuo, 320 Frog Lane, Honolulu, T. H.
Hitchcock, George G. Pomona College, Claremont, Calif.
Hitchcock, W. J. 31-3rd Street, Schenectady, N. Y.
*Hoadley, George A. Swarthmore College, Swarthmore, Pa.
*Hoag, Barton, Ryerson Laboratory, University of Chicago, Chicago, Ill.
Hobbie, John R., Jr. Skidmore College, Saratoga Springs, N. Y.
Hoch, E. B. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*Hodge, Orlando J. Bureau of Standards, Washington, D. C.
*Hodge, Percy, Stevens Institute of Technology, Hoboken, N. J.
Hodgkins, Howard L. George Washington University, Washington, D. C.
*Hodgman, C. D. Case School of Applied Science, Cleveland, Ohio.
Hodgson, M. B. Eastman Kodak Company, Kodak Park, Rochester, N. Y.
Hoernel, Paul C. 35 Orange St., Brooklyn, N. Y.
Hoersch, Victor A. 19 Roland Apts., 909 S. First St., Champaign, Ill.
Hoffman, Samuel O. 355 Hayes St., San Francisco, Calif.
Hoffman, S. V. 258 Broadway, New York, N. Y.
Hogg, J. L. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
Hogness, T. R. Gilman Hall, University of California, Berkeley, Calif.
Holden, W. H. T. 2159 East 23rd St., Brooklyn, N. Y.
Holladay, Lewis L. 938 Dresden Road, Cleveland Heights, Ohio.
Hollnagel, Herbert P. Mass. Institute of Technology, Cambridge, Mass.
Holmes, R. M. 65 Bradley St., Burlington, Vt.
Holte, Harold O. 440 Rebecca Ave., Wilkensburg, Pa.
Homan, John G. Follansbee Brothers Company, Follansbee, W. Va.
Honda, Kanji, 411 Shinsak, Morikowacho, Hongo, Tokyo, Japan.
Hooker, E. H. 25 Pine St., New York, N. Y.
Hooper, William J. Battle Creek College, Battle Creek, Mich.
Hoover, Haidee H. Western Reserve University, Cleveland, Ohio.
Hoover, Paul L. 32 Poplar St., Mansfield, Ohio.
Hoover, William H. Bureau of Standards, Washington, D. C.
Hopfield, John J. University of California, Berkeley, Calif.

HORNBECK, JOHN W. Kalamazoo College, Kalamazoo, Mich.
HOROVITZ, KARL, University of Toronto, Toronto, Canada.
HORTON, A. WELLINGTON, JR. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
HORTON, GEORGE W. Wabash College, Crawfordsville, Ind.
HORTON, J. WARREN, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
HOSHIAI, MASAHARU, 411 Shinsaka, Morikawacho, Hongo, Tokyo, Japan.
*HOTCHKISS, H. J. 208 Dearborn Place, Ithaca, N. Y.
HOUSEHOLDER, P. F. Municipal University, Akron, Ohio.
HOUSTON, WILLIAM V. Norman Bridge Laboratory, California Institute of Technology, Pasadena, Calif.
HOVDA, O. Evansville College, Evansville, Ind.
HOWE, H. E. Cornell University, Ithaca, N. Y.
*HOWER, HARRY S. Carnegie Technical School, Pittsburgh, Pa.
HOWES, DOUGLAS E. Norwich University, Northfield, Vt.
*HOWES, HORACE L. University of New Hampshire, Durham, N. H.
HOWLETT, BERTON A. Rose Polytechnic Institute, Terre Haute, Ind.
HOWSON, EMILY E. Agnes Scott College, Decatur, Ga.
*HOXTON, LLEWELLYN G. University of Virginia, University, Va.
HOYT, FRANK C. Ryerson Physical Laboratory, Chicago, Ill.
HOYT, JOHN E. 304 Brookline Boulevard, Upper Darby Branch Post Office, Philadelphia, Pa.
HU, KANG-FUH, La Universitato Utopia, North of A.N. R.R. Station, Shanghai, China.
*HUBBARD, J. C. New York University, University Heights, New York, N. Y.
HUDDLESTON, JEAN, Le Conte Hall, University of California, Berkeley, Calif.
HUDSON, J. C. Conant Hall 39A, Cambridge, Mass.
HUFF, T. ELLWOOD, 523 Allston Road, Brookline, Upper Darby Branch Post Office, Philadelphia, Pa.
*HUFF, WILLIAM B. Bryn Mawr College, Bryn Mawr, Pa.
HUFFORD, MASON E. 514 South Sluss Ave., Bloomington, Ind.
HUGGINS, MAURICE L. Stanford University, Stanford University, Calif.
*HUGHES, A. L. Washington University, St. Louis, Mo.
*HULBURT, EDWARD O. Naval Research Laboratory, Bellevue, Anacostia, D. C.
*HULL, ALBERT W. Research Laboratory, General Electric Company, Schenectady, N. Y.
*HULL, GORDON F. Dartmouth College, Hanover, N. H.
HULL, LEWIS M. Radio Frequency Laboratory, Boonton, N. J.
HUMMELL, ARNIM D. University of Illinois, Urbana, Ill.
HUMPHREYS, C. JUDSON, East Rochester, Ohio.
*HUMPHREYS, WILLIAM J. Cosmos Club, Washington, D. C.
HUND, AUGUST, Bureau of Standards, Washington, D. C.
*HUNSAKER, J. C. c/o Bureau of Construction and Repair, Navy Department, Washington, D. C.
*HUNT, F. L. Bureau of Standards, Washington, D. C.
HUNT, FREDERICK V. 66 Kirkland St., Cambridge, Mass.
HUNT, J. H. General Motors Research Laboratory, Detroit, Mich.
HUNTER, R. B. Bureau of Standards, Washington, D. C.
HUNTER, THEODORE A. University of Pittsburgh, Pittsburgh, Pa.
*HUTCHINS, C. C. Bowdoin College, Brunswick, Me.
HUTCHINSON, R. O. Washington State College, Pullman, Wash.

HUTCHISSON, ELMER. University of Minnesota, Minneapolis, Minn.
HUXFORD, WALTER S. Doane College, Crete, Neb.
HYATT, J. M. Union College, Schenectady, N. Y.
HYSLOP, WILLIAM H. University of Denver, Denver, Colo.

INGBERG, SIMON H. Bureau of Standards, Washington, D. C.
*INGERSOLL, LEONARD R. University of Wisconsin, Madison, Wis.
INGRAM, SYDNEY B. California Institute of Technology, Pasadena, Calif.
IRETON, HENRY J. C. University of Toronto, Toronto, Canada.
IRION, CLARENCE E. Iowa State College, Ames, Iowa.
IRVIN, O. W. Toledo University, Toledo, Ohio.
IRVING, THOMAS P. University of Notre Dame, Notre Dame, Ind.
ISSHIKI, T. Shibaura Engineering Works, Kanasugi, Shiba-Ku, Tokyo, Japan.
*IVES, FREDERICK E. Hess-Ives Corporation, 1327 Spruce St., Philadelphia, Pa.
*IVES, HERBERT E. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*IVES, JAMES EDMUND, Office of Industrial Hygiene and Sanitation, U. S. Public Health Service, Washington, D. C.

JACKOBSOHN, SAMUEL, 815 Independence Boulevard, Chicago, Ill.
*JACKSON, DUGOLD C. Mass. Institute of Technology, Cambridge, Mass.
JACKSON, W. J. 8 College Road, Princeton, N. J.
JACOBSON, MOSES, Physical Research Laboratories, Victor Talking Machine Co., Camden, N. J.
JAMES, WILLIAM S. 1824 Thousand Islands Blvd., Berkeley, Calif.
*JAMES, WILLIAM STUBBS, Bureau of Standards, Washington, D. C.
*JAMESON, JOSEPH M. Girard College, Philadelphia, Pa.
JAMESON, MALCOLM F. Sterling Hall, University of Wisconsin, Madison, Wis.
JARVIS, CHARLES W. Ohio Wesleyan University, Delaware, Ohio.
*JAUNCEY, G. E. 5626 Julian Ave., St. Louis, Mo.
*JEFFERIES, ZAY, 2800 Harvard Ave., Cleveland, Ohio.
JENNESS, J. R. 610 West Ave., Red Wing, Minn.
JENSEN, AXEL G. 81 East Front St., Red Bank, N. J.
JENSEN, J. C. Nebraska Wesleyan University, University Place, Neb.
JENSEN, WILLIAM J. Wind River, Wyo.
JESSE, W. P. Lehigh University, Bethlehem, Pa.
JESSUP, RALPH S. 1826 Lamont St., N.W., Washington, D. C.
JEWELL, CHARLES S. 459 Provident Ave., Winnetka, Ill.
*JEWETT, FRANK B. 195 Broadway, New York, N. Y.
*JOFFÉ, ABRAHAM, Physical Technical Institute, Leningrad, Russia.
JOHNSON, A. FRANCES, 1048 East Ave., Red Wing, Minn.
JOHNSON, EDWARD T. 5231 Newport Ave., Irving Park Station, Chicago, Ill.
JOHNSON, ELBE H. Box 322, Kenyon College, Gambier, Ohio.
JOHNSON, J. B. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
JOHNSON, THOMAS H. Sloane Physical Laboratories, Yale University, New Haven, Conn.
JOHNSRUD, ALFRED L. Room 760-B, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
JOHNSTONE, G. A. 655 N. Kedzie Ave., Chicago, Ill.
JOHNSTONE, J. H. L. Dalhousie University, Halifax, Canada.
*JOHONOTT, EDWIN SHELDON, JR. Rose Polytechnic Institute, Terre Haute, Ind.
*JOLLIFFE, C. B. Bureau of Standards, Washington, D. C.
*JONES, ARTHUR TABER, Smith College, Northampton, Mass.

JONES, ERNEST J. University of Minnesota, Minneapolis, Minn.
JONES, L. A. 3 Kodak Park, Rochester, N. Y.
JONES, LLOYD T. University of California, Berkeley, Calif.
JONES, REGINALD L. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
JONES, VARNAKALE L. 545 Lahoma Ave., Norman, Okla.
JORDAHL, OLAF M. University of Pittsburgh, Pittsburgh, Pa.
JUDSON, LEWIS V. Bureau of Standards, Washington, D. C.

KABAKJIAN, D. H. 130 Baltimore Ave., Lansdowne, Pa.
*KADESCH, W. H. 1109 Main St., Cedar Falls, Iowa.
KAHLER, HERBERT, Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
KAKINUMA, USAKU, Mitsubishi Institute, 29 Kamifujimae, Hongo, Tokio, Japan.
KAKIUCHI, S. Imperial University of Tokyo, Tokyo, Japan.
*KALMUS, HERBERT T. 110 Brookline Ave., Boston, 17, Mass.
*KANOLT, C. W. Bureau of Mines Experiment Station, Pittsburgh, Pa.
*KARAPETOFF, VLADIMIR, Cornell University, Ithaca, N. Y.
KARBLER, JOHN P. Lehigh University, Bethlehem, Pa.
KARCHER, JOHN C. 313 Glenwood Ave., Bloomfield, N. J.
KARR, LOIS, Lindenwood College, St. Charles, Mo.
*KARRER, ENOCH, 16207 Nelaview Ave., Cleveland, Ohio.
KARRER, SEBASTIAN, Fixed Nitrogen Laboratory, American University, Washington, D. C.
KAZDA, CHARLES B. Crane Junior College, Chicago, Ill.
KEEBLE, WILLIAM H. Randolph-Macon College, Ashland, Va.
KEGERREIS, ROY, 6202 Ingleside Ave., Chicago, Ill.
*KEITH, MARCIA A. 493 Marlboro Road, Brooklyn, N. Y.
KELLER, ARTHUR C. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
KELLOGG, EDWARD W. Research Laboratory, General Electric Co., Schenectady, N. Y.
KELLY, M. J. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*KEMBLE, EDWIN C. Jefferson Physical Laboratory, Harvard University, Cambridge, Mass.
KENDALL, BURTON W. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*KENNARD, E. H. Cornell University, Ithaca, N. Y.
*KENNELLY, ARTHUR E. Harvard University, Cambridge, Mass.
KENNON, W. L. University of Mississippi, University, Miss.
KENT, C. V. Blake Hall, University of Kansas, Lawrence, Kan.
*KENT, NORTON ADAMS, Boston University, Boston, Mass.
KENT, R. H. Aberdeen Proving Ground, Md.
KENYON, FRIEDA, 816 Fifteenth St. Northwest, Washington, D. C.
*KESTER, FREDERICK E. University of Kansas, Lawrence, Kan.
KETTERING, CHARLES F. 807 Mutual Home Building, Dayton, Ohio.
*KEYS, DAVID A. Macdonald Physics Building, McGill University, Montreal, Canada.
KIEFER, JAMES A. Montana State College, Bozeman, Mont.
KILBY, C. M. Randolph-Macon Woman's College, Lynchburg, Va.
KIMBALL, ARTHUR L., JR. Research Laboratory, General Electric Company, Schenectady, N. Y.
KIMBALL, WILLIAM S. 613 Evergreen Ave., East Lansing, Mich.

*King, Arthur S. Mt. Wilson Solar Observatory, Pasadena, Calif.
*King, Louis Vessot, McGill University, Montreal, Canada.
King, R. W. American Telephone and Telegraph Company, 195 Broadway, New York, N. Y.
*Kingdon, K. H. Research Laboratory, General Electric Company, Schenectady, N. Y.
Kingsbury, Burton A. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*Kingsbury, E. F. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*Kingsley, Carl, 22 Lynwood Road, Scarsdale, N. Y.
Kinsman, Arthur D. 80 County Road, Ipswich, Mass.
Kintner, S. M. Westinghouse Research Building, East Pittsburgh, Pa.
Kirk, Edward Braxton, 1311 South Brook St., Louisville, Ky.
Kirkpatrick, Paul, University of Hawaii, Honolulu, Hawaii.
Kiuti, Masazo, No. 13 Komagome-Akebono-tyo, Hongo, Tokyo, Japan.
Klauber, L. M. San Diego Consolidated Gas and Electric Company, San Diego, Calif.
*Kleeman, R. D. 7 Phoenix Ave., Union College, Schenectady, N. Y.
Klein, A. L. California Institute of Technology, Pasadena, Calif.
Klein, Elias, Lehigh University, Bethlehem, Pa.
Kleinschmidt, Robert V. 211 Pleasant St., Arlington, 74, Mass.
*Klopsteg, Paul E. 460 East Ohio St., Chicago, Ill.
Knapp, E. J. Western Reserve University, Cleveland, Ohio.
Knauss, Harold P. 1236 Chew St., Allentown, Pa.
Knipp, A. R. Lingnan University, Canton, China.
*Knipp, Charles T. University of Illinois, Urbana, Ill.
Knoll, L. M. 6120 Carpenter St., West Philadelphia, Pa.
*Knowlton, A. A. Reed College, Portland, Ore.
Knudsen, Vern O. 740 N. Hyperion Ave., Los Angeles, Calif.
Koepp, Otto A. 301 Huntington Court, Madison, Wis.
Koga, Isaac, 411 Shinsaka Morikawacho, Hongo, Tokyo, Japan.
Koller, Lewis R., Research Laboratory, General Electric Co., Schenectady, N. Y.
Koral, Israel, Columbia University, New York, N. Y.
Koppius, Otto, University of Kentucky, Lexington, Ky.
*Kovarik, Alois F. Sloane Laboratory, Yale University, New Haven, Conn.
Kracek, Frank C. Geophysical Laboratory, Washington, D. C.
Kralovec, John G. Kemper Military School, Booneville, Mo.
Kranz, F. W. Riverbank Laboratory, Geneva, Ill.
Krefft, Hermann E. Nela Research Laboratory, Nela Park, Cleveland, Ohio.
*Kreider, D. Albert, Sloane Laboratory, Yale University, New Haven, Conn
Kremer, J. B. Marquette University, Milwaukee, Wis.
Kretchmar, George G. Walla Walla College, College Place, Wash.
Kronig, Ralph de L. Columbia University, New York, N. Y.
Kuehne, J. M. University of Texas, Austin, Tex.
Kujirai, Tsunetaro, 411 Shinsaka, Morikawacho, Hongo, Tokyo, Japan.
Kunsman, Charles H. Fixed Nitrogen Research Laboratory, American University, Washington, D. C.
*Kunz, Jakob, University of Illinois, Urbana, Ill.
Kurrelmeyer, Bernhard, Jefferson Physical Laboratory, Harvard University, Cambridge, Mass.
Kwei, Chi Ting, Yale-in-China, Chang Sha, China.

LADNER, A. COLLINS, 196 Clinton Ave., Brooklyn, N. Y.
LAGERPUSCH, HORACE H. The University of Dubuque, Dubuque, Iowa.
*LAIRD, ELIZABETH R. Mount Holyoke College, South Hadley, Mass.
LAIRD, H. R. 1824 Rowley Ave., Madison, Wis.
LAKE, C. H. Board of Education Building, Cleveland, Ohio.
LALIME, JOHN B. Immaculate Conception College, Montreal, Canada.
LAMPLAND, C. O. Lowell Observatory, Flagstaff, Ariz.
LANE, CLARENCE E. 75 Willowdale Ave., Montclair, N. J.
LANGE, EDWARD H. 4301 Maine Ave., Baltimore, Md.
LANGFORD, GRACE, Barnard College, New York, N. Y.
*LANGMUIR, IRVING, Research Laboratory, General Electric Company, Schenectady, N. Y.
*LAPORTE, OTTO, 3804 Jenifer St., Washington, D. C.
LAPP, CLAUDE J. State University of Iowa, Iowa City, Iowa.
*LaROSA, M. Instituto Fisico, Della R. Universita, Palermo, Italy.
LARSON, KARL G. 966-38th St., Rock Island, Ill.
*LAWRENCE, A. E. Beach Bluff, Mass.
LAWRENCE, ERNEST O. Sloane Laboratory, Yale University, New Haven, Conn.
*LAWRENCE, H. E. University of Rochester, Rochester, N. Y.
LAWTHER, HARRY, JR. 1817 Hickory St., Dallas, Tex.
LAY, JOHN TRACY, 4015 Pine St., Philadelphia, Pa.
LEE, CLAUDIUS, Virginia Polytechnic Institute, Blacksburg, Va.
*LEE, JOHN Y. 20 Museum Road, Shanghai, China.
LEE, THOMAS L. 348 Whitney St., Rochester, N. Y.
*LEEDS, MORRIS E. 4901 Stenton Ave., Philadelphia, Pa.
LEHNHOFF, RAYMOND G. 475 Riddle Road, Cincinnati, Ohio.
LEIFSON, SIGMUND W. University of Nevada, Reno, Nev.
*LEMON, HARVEY B. Ryerson Physical Laboratory, University of Chicago, Chicago, Ill.
LENZEN, VICTOR F. University of California, Berkeley, Calif.
*LESTER, OLIVER C. University of Colorado, Boulder, Colo.
LESTER, HORACE, H. Watertown Arsenal, Watertown, Mass.
LEWIS, A. B. Bureau of Standards, Washington, D. C.
*LEWIS, E. PERCIVAL, University of California, Berkeley, Calif.
LEWIS, GEORGE, St. Thomas College, Wyoming Ave., Scranton, Pa.
*LEWIS, GILBERT N. University of California, Berkeley, Calif.
LEWIS, LESTER C. 253 Salem St., Wakefield, Mass.
LIBMAN, EARL E. 807 South First St., Champaign, Ill.
*LIEBOWITZ, BENJAMIN, 1483 Bay Street, Bayswater, Far Rockaway, Long Island, N. Y.
LILLIE, H. L. Sterling Hall, University of Wisconsin, Madison, Wis.
LINDEMAN, MARCELLA, National Lamp Works of General Electric Company, Nela Park, Cleveland, Ohio.
LINDSAY, GEORGE A. University of Michigan, Ann Arbor, Mich.
LINDSAY, R. BRUCE, Sloane Physics Laboratory, Yale University, New Haven, Conn
LING, CHARLES J. Allegheny College, Meadville, Pa.
LITTLE, EDWARD M. State University of Montana, Missoula, Mont.
*LITTLETON, JESSE T. Corning Glass Works, Corning, N. Y.
LOCKROW, LAURICE L. Union Switch and Signal Company, Swissvale, Pa.
*LOEB, L. B. University of California, Berkeley, Calif.
LOFTON, R. E. Bureau of Standards, Washington, D. C.
LOH, ZUNG-NYI, Ginling College, Nanking, China.

LOMB, ADOLPH, Bausch and Lomb Optical Company, Rochester, N. Y.
LONG, M. B. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*LONGDEN, A. C. Knox College, Galesburg, Ill.
LOOFBOUROW, JOHN R. Crosley Radio Corporation, 7 Norwood National Bank Bldg., Norwood, Ohio.
*LOOMIS, ELMER H. Princeton University, Princeton, N. J.
LOOMIS, F. WHEELER, New York University, University Heights, New York, N. Y.
*LORENZ, CHARLES F. Westinghouse Lamp Company, Bloomfield, N. J.
LORENZ, EDWARD J. 14 Maple St., Bronxville, N. Y.
*LORIA, STANISLAW, Institute of Theoretical Physics, 8 Dlugosga St., Lwow, Poland.
LOTKA, A. J. Metropolitan Life Insurance Company, 1 Madison Ave., New York, N. Y.
LOUGHRIDGE, DONALD H. 2331 North Lake Ave., Altadena, Calif.
LOVELL, W. VIAL, 615 Palmetto Ave., Sanford, Fla.
LOVING, ROBERT E. University of Richmond, Richmond, Va.
*LOWATER, FRANCES, Tower Court, Wellesley College, Wellesley, Mass.
LUBOVICH, V. P. University of Colorado, Boulder, Colo.
LUCKEY, GEORGE P. McCook Field, Dayton, Ohio.
*LUCKIESH, M. Lighting Research Laboratory, Nela Park, Cleveland, Ohio.
LUKE, ITTAI A. Ordnance Dept. U.S.A., Picatinny Arsenal, Dover, N. J.
*LUNN, ARTHUR C. University of Chicago, Chicago, Ill.
*LYMAN, THEODORE, Jefferson Physical Laboratory, Harvard University, Cambridge, Mass.
LYNCH, JOHN JOSEPH, Ignatiuskolleg, Valkenberg, L. Holland.
LYNCH, WILLIAM A. New York University, University Heights, New York, N. Y.
LYNDE, CARLETON J. Teachers College, Columbia University, New York, N. Y.
LYON, ERIC ROSS, Kansas State College, Manhattan, Kan.

*MAASS, OTTO, McGill University, Montreal, Canada.
MACALPINE, WILLIAM W. Columbia University, New York, N. Y.
MACCOLL, L. A. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
MACELWANE, JAMES B. 221 North Grand Boulevard, St. Louis, Mo.
MACGREGOR, DONALD G. Mount Allison University, Sackville, N. B., Canada.
*MACINNES, D. A. Massachusetts Institute of Technology, Cambridge, Mass.
*MACKAY, G. M. J. Research Laboratories, General Electric Company, Schenectady, N. Y.
*MACKAY, THOMAS C. 3812 Alton Place, N. W., Washington, D. C.
*MACKENZIE, A. STANLEY, Dalhousie University, Halifax, Nova Scotia.
MACKENZIE, DONALD, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
MACKEOWN, S. S. c/o Westinghouse Lamp Works, Bloomfield, N. J.
MACLEOD, J. H. University of Alberta, Edmonton, Alberta, Canada.
MACNAIR, WALTER A. Johns Hopkins University, Baltimore, Md.
*MACNUTT, BARRY, Lehigh University, South Bethlehem, Pa.
MAGARIAN, M. C. University of Hawaii, Honolulu, Hawaii.
*MAGIE, WILLIAM F. Princeton University, Princeton, N. J.
*MAGNUSSON, CARL EDWARD, University of Washington, Seattle, Wash.
MAGNUSSON, J. P. 2829-11½ Ave., Rock Island, Ill.
MAHONEY, DANIEL P. Holy Cross College, Worcester, Mass.
MAHONEY, J. J. 1538 Fourth Ave., Terre Haute, Ind.
MAILEY, R. D. 323 Springdale Ave., East Orange, N. J.
MAIZLISH, I. Centenary College of Louisiana, Shreveport, La.

*MALTBY, MARGARET E. Barnard College, Columbia University, New York, N. Y.
MANN, HUBERT, 1150 Fifth Ave., New York, N. Y.
MANN, WILLIAM A. Golf Road, Clarendon Hills, Ill.
MANNES, LEOPOLD D. 120 East 75 St., New York, N. Y.
MARCUS, ALEXANDER, College of the City of New York, New York, N. Y.
MARIE, SISTER ALOYSIUS, Trinity College, Washington, D. C.
MARIS, H. B. Riverdale, Md.
MARSHALL, MILTON, Box 294, Provo, Utah.
MARTIN, EDWARD J. General Motors Research Laboratory, General Motors Building, Detroit, Mich.
MARTIN, JOHN R. Case School of Applied Science, Cleveland, Ohio.
MARTIN, MILES J. University of Wisconsin, Madison, Wis.
MARTIN, PAUL E. Muskingum College, New Concord, Ohio.
MARTIN, R. EARL, Lehigh University, Bethlehem, Pa.
MARTIN, THEODORE J. 1328 Mound St., Madison, Wis.
MARVIN, HARRY B. 121 Woodland Ave., Schenectady, N. Y.
MARVIN, HENRY H. University of Nebraska, Lincoln, Neb.
MASIUS, MORTON L. Worcester Polytechnic Institute, Worcester, Mass.
*MASON, MAX, 1146 East 59 St., Chicago, Ill.
MASON, WARREN P. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*MATHER, WILLIAM T. University of Texas, Austin, Tex.
MATHES, R. C. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
MATLOCK, ROBERT C. 7335 Ellwood Ave., Chicago, Ill.
MATTE, ANDREW L. American Telephone and Telegraph Co., 195 Broadway, New York, N. Y.
*MAUCHLY, S. J. Department of Terrestrial Magnetism, Washington, D. C.
MAXFIELD, J. P. 99 Prospect Ave., Maplewood, N. J.
MAXWELL, LOUIS R. University of Minnesota, Minneapolis, Minn.
MAY, FREDERICK A. Cornell University, Ithaca, N. Y.
MCALLISTER, LAWRENCE E. Shorter College, Rome, Ga.
MCBANE, LOUIS J. 1336 Oak St., N.W., Washington, D. C.
MCCAULEY, G. V. 59 East 2nd St., Corning, N. Y.
*MCCLUNG, R. K. University of Manitoba, Winnipeg, Canada.
MCCOLLUM, ELTON V. Box 296, Helena, Okla.
MCCORKLE, PAUL, Western Reserve University, Cleveland, Ohio.
*MCCOY, HERBERT N. 1623 Hyde Park Boulevard, Chicago, Ill.
MCCURDY, W. H. 2724 Maryland Ave., Baltimore, Md.
*MCDOWELL, LOUISE S. 6 Norfolk Terrace, Wellesley, Mass.
*MCELFRESH, WILLIAM E. Williams College, Williamstown, Mass.
MCEWEN, G. F. Box 68, La Jolla, Calif.
*MCKEEHAN, LOUIS W. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
MCKOWN, F. W. American Telephone and Telegraph Co., 195 Broadway, New York, N. Y.
*MCLENNAN, J. C. University of Toronto, Toronto, Canada.
MCMAHON, A. M. 5647 Blackstone Ave., Chicago, Ill.
MCMASTER, ARCHIE J. 202 Broadway North, Urbana, Ill.
MCNICHOLAS, HARRY J. Bureau of Standards, Washington, D. C.
MCQUARRIE, W. C. Lafayette College, Easton, Pa.
*MCTAGGART, H. A. University of Toronto, Toronto, Canada.
MEARS, ATHERTON H. 1611 Spencer St., Philadelphia, Pa.

*MEES, C. E. K. Kodak Park, Rochester, N. Y.
*MEES, C. LEE, The Walden, Terre Haute, Ind.
*MEGGERS, WM. F. Bureau of Standards, Washington, D. C.
MEI, ALEXIS, Maison St. Augustin, Rue des Augustins, 7, Enghien, Belgium.
MEI, Y. C. Tsing Hua College, Peking, China.
MELCHER, A. F. Marland Oil Co., Ponca City, Okla.
*MENDENHALL, CHARLES E. University of Wisconsin, Madison, Wis.
MERCER, CHARLES F. University of South Carolina, Columbia, S. C.
MEREDITH, CLIVE B. "Fernwood," Cazenovia, N. Y.
*MERICA, PAUL D. International Nickel Co., 67 Wall Street, New York, N. Y.
*MERRILL, JOSEPH F. University of Utah, Salt Lake City, Utah.
*MERRILL, PAUL W. Mt. Wilson Observatory, Pasadena, Calif.
*MERRITT, ERNEST, Cornell University, Ithaca, N. Y.
MERRITT, GEORGE E. Bureau of Standards, Washington, D. C.
MERRYMON, WM. WALTER, 1010 Thompson St., Carbondale, Ill.
MERTZ, PIERRE, Cornell University, Ithaca, N. Y.
*MERWIN, HERBERT E. 2946 Newark St., Washington, D. C.
MESERVEY, ARTHUR B. Wilder Laboratory, Dartmouth College, Hanover, N. H.
MESSENGER, HELEN ALTHEA, 545 West 164 St., New York, N. Y.
METCALF, WILMOT V. Oberlin College, Oberlin, Ohio.
MEYER, CHARLES F. University of Michigan, Ann Arbor, Mich.
*MEYER, FREDERICK W. Hagenring 49, Braunschweig, Germany.
MEYER, J. FRANKLIN, Bureau of Standards, Washington, D. C.
*MICHELSON, A. A. University of Chicago, Chicago, Ill.
MIESSNER, BENJAMIN F. 233 Audley St., South Orange, N. J.
MILES, J. WALTER, Irwin, Pa.
*MILHAM, WILLIS I. Williams College, Williamstown, Mass.
*MILLAR, PRESTON S. Electrical Testing Laboratories, 80th St., and East End Ave., New York, N. Y.
MILLER, A. H. Dominion Observatory, Department of the Interior, Ottawa, Canada.
MILLER, CARL D. Millis, Mass.
MILLER, CARL W. 6 Dexterdale Road, Providence, R. I.
*MILLER, DAYTON C. Case School of Applied Science, Cleveland, Ohio.
MILLER, ERIC R. U. S. Weather Bureau, Madison, Wis.
MILLER, GEORGE R. 1 West St., Gettysburg, Pa.
MILLER, L. F. University of Minnesota, Minneapolis, Minn.
MILLER, R. F. College of Emporia, Emporia, Kan.
*MILLIKAN, ROBERT ANDREWS, California Institute of Technology, Pasadena, Calif.
*MILLS, JOHN, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
MILNER, R. D. 4901 Stenton Ave., Philadelphia, Pa.
*MINOR, RALPH S. University of California, Berkeley, Calif.
*MINTON, JOHN P. Robin Hood Road, White Plains, N. Y.
MITCHELL, ELIZABETH, 7th St. West, West Lafayette, Ind.
MITCHELL, W. A. c/o Andersen, Meyer & Co., Tsinan, Shantung, China.
MOCK, FRANK CHARLES, 1106 West Illinois St., Urbana, Ill.
*MOFFITT, G. W. 39 Augustine St., Rochester, N. Y.
*MOHLER, FRED L. Bureau of Standards, Washington, D. C.
*MOHLER, JOHN FRED, Dickinson College, Carlisle, Pa.
MOLBY, FRED A. University of West Virginia, Morgantown, W. Va.
MONK, GEORGE S. 6009 Kimbark Ave., Jackson Park Station, Chicago, Ill.
MOODY, H. W. Agricultural and Mechanical College, Miss.
MOON, CHARLES, Bureau of Standards, Washington, D. C.

MOONEY, MELVIN, University of Chicago, Chicago, Ill.
MOORE, C. N. General Electric Company, Schenectadv. N. Y.
MOORE, CHARLES R. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
MOORE, E. J. Science Hall, University of Buffalo, Buffalo, N. Y.
MOORE, HENRY L. Carnegie Institute of Technology, Pittsburgh, Pa.
*MOORE, JOSEPH H. Lick Observatory, Mt. Hamilton, Calif.
MOORE, WM. C. 4110 Fernhill Ave., Baltimore, Md.
MORAN, CLEMENT, University of New Hampshire, Durham, N. H.
*MORE, LOUIS T. University of Cincinnati, Cincinnati, Ohio.
*MORECROFT, JOHN H. Columbia University, New York, N. Y.
MOREHOUSE, DANIEL W. Drake University, Des Moines, Iowa.
MOREHOUSE, WALTER B. Cornell University, Ithaca, N. Y.
MORELL, L. G. Michigan State College, East Lansing, Mich.
*MORGAN, J. LIVINGSTON R. Columbia University, New York, N. Y.
MORGAN, RAYMOND, University of Pennsylvania, Philadelphia, Pa.
MORRIS, J. C. Princeton University, Princeton, N. J.
MORRIS, LLOYD W. University of Wisconsin, Madison, Wis.
MORRISON, EDWIN, Michigan State College, East Lansing, Mich.
MORRISON, MONTFORD, 711 West Lake St., Chicago, Ill.
MORROW, ROGER M. Park College, Parkville, Mo.
MORSE, JARED KIRTLAND, 5800 Blackstone Ave., Chicago, Ill.
*MORSE, LEIGHTON B. 206 Christie Heights, Leonia, N. J.
MORTIMORE, ROY H. Lamoni, Iowa.
MOTT-SMITH, HAROLD M. General Electric Co., Schenectady, N. Y.
*MOUNTCASTLE, HARRY W. Western Reserve University, Cleveland, Ohio.
*MUELLER, E. F. 3914 Huntington St., Washington, D. C.
MULDER, PETER J. University of Pennsylvania, Philadelphia, Pa.
*MULLIKEN, ROBERT S. Harvard University, Cambridge, Mass.
MURCH, LESLIE F. Dartmouth College, Hanover, N. H.
MURDOCK, CARLETON C. Cornell University, Ithaca, N. Y.
*MURNAGHAN, FRANCIS D. 702 Evesham Ave., Govans, Baltimore, Md.
MUTCH, WILLIAM W. University of Wisconsin, Madison, Wis.
MYERS, RALPH E. Westinghouse Lamp Co., Bloomfield, N. J.

*NAGAOKA, HANTARO, Institute of Physical and Chemical Research, Komagome, Hongo-ku, Tokyo, Japan.
*NAKAMURA, SEIJI, Tokyo Imperial University, Physical Institute, Tokyo, Japan.
NATHANSON, J. B. Carnegie Institute of Technology, Pittsburgh, Pa.
*NAYLOR, J. P. DePauw University, Greencastle, Ind.
NELMS, W. S. Emory University, Ga.
NELSON, R. A. Mount Vernon, Iowa.
NETTLETON, L. L. Union Switch & Signal Co., Swissvale, Pa.
NEUMAN, LEONARD J. University of California, Berkeley, Calif.
NEWCOMER, H. S. c/o Dr. Irving Crandall, 463 West St., New York, N. Y.
NEWHALL, RALPH P. 9 Arbutus Road, Swampscott, Mass.
NICHOLAS, WARREN W. 458 Channing Ave., Palo Alto, Calif.
*NICHOLS, EDWARD L. Cornell University, Ithaca, N. Y.
NICHOLSON, PATRICK J. University of St. Francis, Antigonish, Nova Scotia, Canada.
NICOLSON, ALEXANDER MCLEAN, 260 Riverside Drive, New York, N. Y.
NIELSEN, JENS RUD, University of Oklahoma, Norman, Okla.
NIELSEN, WALTER M. Duke University, Durham, N. C.

*NIPHER, FRANCIS E. Washington University, St. Louis, Mo.
NISHI, TAKOSHI, 411 Shinsaka, Morikawacho, Hongo, Tokyo, Japan.
*NISHIKAWA, SHOJI, 82 Otsuka-Sakashita-cho, Koishikawa-ku, Tokyo, Japan.
NOLL, F. H. WALDEMAR, 502 Berea College, Berea, Ky.
NORMAN, NATHANIEL C. 417 West 118 St., New York, N. Y.
*NORTON, C. L. Massachusetts Institute of Technology, Cambridge, Mass.
NORTON, EDWARD L. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*NORTON, F. H. Massachusetts Institute of Technology, Cambridge, Mass.
NORTON, JOHN T. Massachusetts Institute of Technology, Cambridge, Mass.
NOTTINGHAM, WAYNE B. 2 South Wilton St., Princeton, N. J.
NOYES, BRADFORD, 801 Arnett Boulevard, Rochester, N. Y.
NULL, FAY EDISON, 1109 West Springfield, Urbana, Ill.
NUSBAUM, CHRISTIAN, Case School of Applied Science, Cleveland, Ohio.
*NUTTING, PERLEY GILMAN, 1644 Irving St., Washington, D. C.
NYE, ARTHUR W. University of Southern California, Los Angeles, Calif.
NYQUIST, HARRY, Box 167, Millburn, N. J.
NYSWANDER, R. E. University of Denver, Denver, Colo.

O'BRIEN, BRIAN, J. N. Adam Memorial Hospital, Perrysburg, N. Y.
O'DAY, MARCUS D. 1930 Stuart St., Berkeley, Calif.
OLMSTEAD, L. B. Bureau of Soils, Washington, D. C.
OLMSTEAD, PAUL S. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
OLPIN, A. RAY. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*OLSHAUSEN, GEORGE R. 2732 Hillegass Ave., Berkeley, Calif.
OLSON, JULIUS, 1294 Vogel Ave., Abilene, Tex.
ONDRAK, AMBROSE L. St. Procopius College, Lisle, Ill.
ORANGE, J. A. 28 Birkbeck Road, Enfield, Middlesex, England.
ONO, SUMINOSUKE, 82 Otuka-sakasita-tyo, Koisikawa, Tokyo, Japan.
ORNDOFF, BENJAMIN A. North Chicago Hospital, 2551 North Clark St., Chicago, Ill.
ORVIS, WILLIAM E. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
OSBORN, FREDERICK A. University of Washington, Seattle, Wash.
*OSBORNE, H. S. American Telephone and Telegraph Co., 195 Broadway, New York, N. Y.
OSTER, ROBERT HAROLD, Pennsylvania State College, State College, Pa.
OTIS, RUSSELL M. 288 Park Ave., East Orange, N. J.
OVERN, O. B. 1222 St. Anthony Ave., St. Paul, Minn.
OWEN, GWILYM E. University of Pennsylvania, Philadelphia, Pa.
OWENS, F. W. 110 Westbourne Lane, Ithaca, N. Y.

PACKARD, A. APPLETON, St. Stephens College, Annandale-on-the-Hudson, N. Y.
*PAGE, LEIGH, Yale University, New Haven, Conn.
PAGE, NEWELL C. Massachusetts Institute of Technology, Cambridge, Mass.
PAGLIARULO, VINCENT, 5533 Maryland Ave., Chicago, Ill.
PAINE, GEORGE PORTER, Box 131, Newark, Del.
*PALMER, A. DEFOREST, Brown University, Providence, R. I.
PALMER, ERIK S. 494 Whitney Ave., New Haven, Conn.
PALMER, JR., FREDERICK J. Haverford College, Haverford, Pa.
PALMER, HERBERT H. 508 West 114th St., New York, N. Y.
*PARKER, HERSCHEL C. 21 Fort Green Place, Brooklyn, N. Y.
PARKER, NEWELL D. 867 West 181 St., New York, N. Y.

PARLIN, WELLINGTON A. Swan, Iowa.
PARMLEY, THOMAS J. Cornell University, Ithaca, N. Y.
PARSONS, C. W. D. 1743 Wesley Ave., Evanston, Ill.
*PARSONS, LOUIS A. Whitman College, Walla Walla, Wash.
PARSONS, SAMUEL R. University of Arkansas, Fayetteville, Ark.
PARTRIDGE, EDWARD A. West Philadelphia High School for Boys, 48th and Walnut Sts., Philadelphia, Pa.
PATON, ROBERT F. University of Illinois, Urbana, Ill.
*PATTERSON, A. H. University of North Carolina, Chapel Hill, N. C.
PATTERSON, CHALMERS N. 125 East 4th St., Hastings, Neb.
*PATTERSON, GEORGE WASHINGTON, 2101 Hill St., Ann Arbor, Mich.
PATTERSON, JOHN, Meteorological Office, Toronto, Ontario, Canada.
PATTERSON, ROBERT A. 51 Taylor Court, Troy, N. Y.
PEACOCK, H. B. 914 East Helen St., Tucson, Ariz.
PEARSALL, GEORGE M. 27 Mead St., Walton, N. Y.
PECZALSKI, T. Institut of Theoretical Physics, University of Poznan, Poznan (Poland).
*PEEK, F. W., JR. 29 Wendell Ave., Pittsfield, Mass.
*PEGRAM, GEORGE B. Columbia University, New York, N. Y.
PENROD, E. B. 143 Oak St., Hillsdale, Mich.
PERKINS, BEAUREGARD, JR. Louisiana State University, Baton Rouge, La.
*PERKINS, HENRY A. 55 Forest St., Hartford, Conn.
PERRY, W. S. University of Florida, Gainesville, Fla.
*PETERS, CHAUNCEY G. Bureau of Standards, Washington, D. C.
PETERSEN, MAX H. Washington Square College, Washington Square, New York, N. Y.
PETERSON, A. I. c/o Bell Telephone Company of Canada, 118 Notre Dame St., West Montreal, Canada.
PETERSON, EUGENE, Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
PETRY, ROBERT L. Roanoke College, Salem, Va.
*PFUND, A. H. Johns Hopkins University, Baltimore, Md.
PHEBUS, W. C. Clemson College, S. C.
PHELPS, FRANCIS P. Bureau of Standards, Washington, D. C.
*PHILLIPS, H. B. Massachusetts Institute of Technology, Cambridge, Mass.
PHILLIPS, T. D. Washington Square College, Washington Square, New York, N. Y.
PIDGEON, H. A. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
PIELEMEIER, W. H. 234 S. Gill St., State College, Pa.
PIENKOWSKY, A. T. 6118 Thirty-third St., Washington, D. C.
*PIERCE, GEORGE W. 7 Berkeley Place, Cambridge, Mass.
PIERCE, H. F. 437 West 59 St., New York, N. Y.
PIERSOL, ROBERT J. Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
PIETENPOL, C. J. University of Colorado, Boulder, Colo.
PIETENPOL, W. B. University of Colorado, Boulder, Colo.
PISTON, DONALD S. 46 College Ave., Orono, Me.
PITTS, CHARLES R. 8 Garner Ave., Schenectady, N. Y.
PLAGGE, HERBERT J. 519 Lynn Ave., Ames, Iowa.
*PLASKETT, H. H. Dominion Astrophysical Observatory, Department of the Interior, Victoria, B. C.
PLYLER, EARLE KEITH, University of North Carolina, Chapel Hill, N. C.
POETKER, ALBERT H. Loyola High School, Calvert & Madison Sts., Baltimore, Md.
POINDEXTER, FRANKLIN E. Washington University, St. Louis, Mo.

POMEROY, GEORGE A. 1321 Cortez Ave., Burlingame, Calif.
POMEROY, J. C. Southwestern University, Memphis, Tenn.
POMEROY, W. C. 2534 College Ave., Berkeley, Calif.
POOLER, LOUIS G. Columbia University, New York, N. Y.
PORITSKY, ABRAHAM, 858 Nela View Road, Cleveland, Ohio.
PORITSKY, HILLEL, White Hall, Ithaca, N. Y.
PORTER, DAVID D. Rutgers College, New Brunswick, N. J.
PORTER, MILDRED B. Carleton College, Northfield, Minn.
*PORTER, ROYAL A. 861 Ostrom Ave., Syracuse, N. Y.
PORTER, THOMAS, 248 Highland St., Worcester, Mass.
*POTTS, LOUIS M. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
POWER, A. D. Lawrence College, Appleton, Wis.
POWER, CARLETON E. New York State College for Teachers, Albany, N. Y.
POWERS, W. F. 7 Allen St., Amherst, Mass.
PRATT, FRANK R. 41 N. Seventh Ave., New Brunswick, N. J.
PRATT, KENNETH H. 226 Ocean St., Lynn, Mass.
PRICE, ROBERT L. University of California, Berkeley, Calif.
*PRIEST, IRWIN G. 3418 Rodman St., Washington, D. C.
PRINCE, DAVID CHANDLER, 1424 Wendell Ave., Schenectady, N. Y.
PRINE, CHARLES W. Carnegie Institute of Technology, Pittsburgh, Pa.
PRITCHARD, HOWARD A. 11 Flower City Park, Rochester, N. Y.
*PROCTOR, CHARLES A. Dartmouth College, Hanover, N. H.
PRUETT, J. HUGH, University of Oregon, Eugene, Ore.
*PUPIN, M. I. Columbia University, New York, N. Y.
PURDY, JOHN F. 175 North St., Cuyahoga Falls, Ohio.
PYLE, LINDLEY, Washington University, St. Louis, Mo.

QUIMBY, S. L. Columbia University, New York, N. Y.

RABI, ISIDOR I. 719 Eastern Parkway, Brooklyn, N. Y.
RABINOV, IRWIN I. University of Chicago, Chicago, Ill.
RABURN, G. E. R.R. No. 8, Manhattan, Kan.
RADTKE, ALBERT A. 829 Greenwich St., New York, N. Y.
RAGSDALE, E. J. W. c/o Edw. G. Budd Mfg. Co., Philadelphia, Pa.
*RAMAN, C. V. 210 Bow-Bazar St., Calcutta, India.
*RAMSEY, R. R. 615 East Third St., Bloomington, Ind.
RANDALL, D. P. Box 28, University Sta. Syracuse, N. Y.
*RANDALL, H. M. 1208 Prospect St., Ann Arbor, Mich.
RANDOLPH, ALFRED M. Box 395, Warrenton, Va.
RANDOLPH, JAMES R. 3210 Newark St., Washington, D. C.
RAPP, I. M. R.D. 3, Phoenixville, Pa.
RASHEVSKY, NICOLAS, 432 Montview Place, Wilkinsburgh, Pa.
RATLIFF, R. T. School of Mines, 856 Park St., Rolla, Mo.
RAUB, LEO G. University of Louisville, Louisville, Ky.
RAWDON, HENRY S. Bureau of Standards, Washington, D. C.
*RAYMOND, WILLIAM J. University of California, Berkeley, Calif.
READ, HARRY S. J-3 Court Apartments, La Grange, Ill.
REDDING, C. S. 4901 Stenton Ave., Philadelphia, Pa.
*REESE, HERBERT M. University of Missouri, Columbia, Mo.
REEVES, RUSSEL, United States Box 2233, Enid, Okla.
*REID, HARRY FIELDING, Johns Hopkins University, Baltimore, Md.
REID, HENRY J. E. N.A.C.A., Langley Field, Hampton, Va.

*Rentschler, Harvey C. c/o Westinghouse Lamp Co., Bloomfield, N. J.
Reynolds, F. W. 383 Nelson Ave., Grantwood, N. J.
Reynolds, Neil B. 26 Riverside Ave., Scotia, N. Y.
Rhodes, Payton N. Crozet, Va.
Rice, Chester W. 102 Lenox Road, Schenectady, N. Y.
Rice, M. E. 1538 Vermont St., Lawrence, Kan.
Rich, D. L. 1205 Forest Ave., Ann Arbor, Mich.
Richards, Harold F. Florida State College for Women, Tallahasse, Fla.
*Richards, Horace Clark, 4812 Fairmount Ave., Philadelphia, Pa.
*Richardson, O. W. 45 Haverstock Hill, Hampstead, N. W. 3, London, England.
Richmond, Donald E. 116 Oak Ave., Ithaca, N. Y.
*Richtmyer, F. K. Cornell University, Ithaca, N. Y.
Ricker, Norman H. P. O. Box 1619, Houston, Texas.
Rieber, Frank, 625 Phelan Building, San Francisco, Calif.
Riesz, Robert R. 707 South Fifth Ave., Mt. Vernon, N. Y.
Riffolt, Nils A. Naval Proving Ground, Dahlgren, Va.
Rines, David, 20 Kilby St., Boston, Mass.
Rizer, Conrad K. 79 South 23 St., Pittsburgh, Pa.
*Robb, William Lispenvard, P. O. Box 592, Troy, N. Y.
Robbins, Charles W. 325 South Spring Ave., La Grange, Ill.
*Robertson, John K. Queen's University, Kingston, Ontario.
Robertson, Norman S. 901 Temple Building, Toronto, Ontario.
Robeson, F. L. Virginia Polytechnic Institute, Blacksburg, Va.
*Robinson, L. T. c/o General Electric Co., Schenectady, N. Y.
Robinson, Samuel, Union College, Schenectady, N. Y.
Rockwell, Clarence, 509 Cato St., Oakland Station, Pittsburgh, Pa.
*Rodebush, Worth H. University of Illinois, Urbana, Ill.
Rodman, Jessie A. 4933 Rubicarn Ave., Germantown, Pa.
*Roebuck, John R. 2210 Hollister St., Madison, Wis.
*Rogers, F. J. Leland Stanford Jr. University, Stanford University, Calif.
Rogers, Robert A. State University of Iowa, Iowa City, Iowa.
Rollefson, Aimar H. University of Wisconsin, Madison, Wis.
Rollefson, K. E. c/o Pfanstiehl Radio Co., Waukegan, Ill.
Roller, Duane E. University of Oklahoma, Norman, Okla.
Roman, Irwin, Box 1817, Houston, Tex.
Romberg, Arnold, University of Texas, Austin, Tex.
Romig, Lee Vincent, Superintendent of Payne Public Schools, Payne, Ohio.
Rood, Paul, 13 Brierwood Boulevard, Schenectady, N. Y.
Roop, H. D. 401 Madison Ave., Memphis, Tenn.
Roope, P. M. Clark University, Worcester, Mass.
Rose, Clarence E. Arkansas Cold Storage Co., Little Rock, Ark.
Rose, Edwin L. 233 Columbia St., Pasadena, Calif.
Rose, John L. Alabama Polytechnic Institute, Auburn, Ala.
Rosengarten, George, 1105 Edgewood Road, Brookline, Pa.
*Ross, A. D. The University, Perth, Western Australia.
Ross, P. A. 1830 Cowper St., Palo Alto, Calif.
Rossbacher, H. 316 Fourth St., Hinsdale, Ill.
Rothrock II, Addison M. State College, Pa.
Rouse, Glenn F. 516 Brodhead Ave., Bethlehem, Pa.
*Rowe, Allan W. 295 Commonwealth Ave., Boston, Mass.
Roys, Carl S. Purdue University, Lafayette, Ind.
Roys, Harvey C. University of Oklahoma, Norman, Okla.

RUARK, ARTHUR E. 1826 Lamont St., Washington, D. C.
RUDY, RICHARD, 1881 Grantham Road, Cleveland, Ohio.
RUHLMANN, CYRIL, Spring Hill College, Spring Hill, Ala.
RUSK, R. D. North-Western College, Naperville, Ill.
*RUSSELL, HENRY N. Princeton University, Princeton, N. J.
RUSSELL, HOWARD W. 116 Oak Ave., Ithaca, N. Y.
RUZICKI, HENRY J. St. Martin's College, Lacey, Wash.
*RYAN, HARRIS, Stanford University, Calif.

*SABINE, PAUL E. Riverbank, Geneva, Ill.
SACIA, C. F. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
SAGEBEER, RICHARD G. Berwyn, Pa.
SAGUI, CORNELIO L. Castelnuovo Dei Sabbioni, Arezzo, Italy.
ST. CLAIR, BYRON W. Standardizing Laboratory, General Electric Co., West Lynn, Mass.
ST. JOHN, ANCEL, Room 501, 505 Fifth Ave., New York, N. Y.
*ST. JOHN, C. E. Mt. Wilson Observatory, Pasadena, Calif.
ST. PETER, W. N. University of Pittsburgh, Pittsburgh, Pa.
SALKOVER, MEYER, 17 Juergens Ave., Cincinnati, Ohio.
SANDERS, WILLIAM H. University of Illinois, Urbana, Ill.
*SANFORD, FERNANDO, 450 Kingsley Ave., Palo Alto, Calif.
SANTOS, ANTHONY S. International Standard Electric Corp., 25 Broad St., New York, N. Y.
*SATTERLY, JOHN, University of Toronto, Toronto, Canada.
SAUNDERS, FELIX, 5304 Kenwood Ave., Chicago, Ill.
*SAUNDERS, FREDERICK A. Harvard University, Cambridge, Mass.
*SAUREL, PAUL L. College of the City of New York, New York, N. Y.
*SAWYER, RALPH A. 1132 Michigan Ave., Ann Arbor, Mich.
SAWYER, RAYMOND B. Marietta College, Marietta, Ohio.
SCHAD, LLOYD W. Westinghouse Electric & Mfg. Co., Research Building, East Pittsburgh, Pa.
SCHAEFFER, ELMER R. c/o Johns-Manville, Inc., 292 Madison Ave., New York, N. Y.
SCHELLENG, J. C. 24 Fidelity St., Maplewood, N. J.
SCHLENKER, VESPER A. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*SCHLINK, F. J. c/o A.E.S.C., 29 West 39th St., New York, N. Y.
SCHMIDT, C. C. University of Illinois, Urbana, Ill.
SCHNABLE, GEORGE L. 144 Delaplaine Road, Riverside, Ill.
SCHNEIDER, WALTER, 3958 Cosman Ave., Long Island City, N. Y.
SCHRENK, MATTHEW H. 1204 East Adams St., Syracuse, N. Y.
SCHRIEBER, E. H. Normal School, Superior, Wis.
SCHRIEVER, WILLIAM, University of Oklahoma, Norman, Okla.
SCHULZ, WILLIAM E. 1108 West Green St., Urbana, Ill.
SCHWARZSCHILD, M. M. Furnald Hall, Columbia University, New York, N. Y.
SCOTT, ARNOLD H. Bureau of Standards, Washington, D. C.
SCOTT, MERIT, 116 Oak Ave., Ithaca, N. Y.
SEARLES, PAUL J. Public Works Department, Navy Yard, Boston, Mass.
SEARS, FREDERICK E. St. Paul's School, Concord, N. H.
*SEE, T. J. J. Naval Observatory, Mare Island, Calif.
SEEMANN, HERMAN E. Cornell University, Ithaca, N. Y.
SEIDELL, THOMAS G. 25 Exeter Road, Avondale Estate, Ga.
SERVICE, JERRY H. U. S. Coast Geodetic Survey, Washington, D. C.

*SEVERINGHAUS, WILLARD L. Columbia University, New York, N. Y.
SEWARD, RAYMOND S. College of Puget Sound, North 15th & Warner Sts., Tacoma, Wash.
SHACKELFORD, BENJAMIN, c/o Westinghouse Lamp Co., Bloomfield, N. J.
SHACKLETON, S. P. 195 Broadway, New York, N. Y.
SHALLENBERGER, G. D. Missoula, Mont.
SHANNON, JAMES I. St. Louis University, St. Louis, Mo.
*SHARP, CLAYTON H. 80th St. and East End Ave., New York, N. Y.
SHARP, DONALD E. 132 Maple Ave., Hamburg, N. Y.
*SHAW, A. NORMAN, McGill University, Montreal, Canada.
SHAW, GEORGE R. Vacuum Tube Division, Nela Park, Cleveland, Ohio.
*SHEA, DANIEL W. The Catholic University of America, Washington, D. C.
SHEA, JOHN D. University of California, Berkeley, Calif.
*SHEDD, J. C. Occidental College, Los Angeles, Calif.
SHELDON, H. HORTON, Washington Square College, New York University, New York, N. Y.
SHENSTONE, A. G. 30 Nassau St., Princeton, N. J.
SHEWHART, W. A. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*SHIELDS, MARGARET C. Wilson College, Chambersburg, Pa.
SHINOMIYA, TOYOJI, c/o Mito Kot-Gakko, Mito, Japan.
SHOLLENBERGER, FOREST J. Mt. Union College, Alliance, Ohio.
SHORE, HENRY, University of Wisconsin, Madison, Wis.
SHRADER, J. E. Drexel Institute, Philadelphia, Pa.
SHROEDINGER, E. Zurich 6, Huttenstrasse 9, Switzerland.
SHRUM, GORDON M. University of British Columbia, Vancouver, B. C.
*SIEG, L. P. University of Pittsburgh, Pittsburgh, Pa.
SIEGMUND, H. O. Bell Telephone Laboratories, Inc., 463 West St., New York, N.Y.
*SILBERSTEIN, LUDWIK, Research Laboratory, Kodak Park, Rochester, N. Y.
*SILSBEE, F. B. Bureau of Standards, Washington, D. C.
SILVEY, O. W. A. & M. College of Texas, College Station, Tex.
SIMPSON, FRANK M. Bucknell College, Lewisburg, Pa.
SIMPSON, MARGERY, DePauw University, Greencastle, Ind.
SINGH, SURAIN, University of Pittsburgh, Pittsburgh, Pa.
SIVIAN, L. J. Bell Telephone Laboratories, Inc., 463 West St., New York, N.Y.
SKINKER, MURRAY F. Box 427, Brooklyn, N. Y.
*SKINNER, CLARENCE A. Bureau of Standards, Washington, D. C.
*SKINNER, C. E. Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
SKINNER, CHARLES H. Ohio Wesleyan University, Delaware, Ohio.
SKINNER, E. W. Olivet College, Olivet, Mich.
SLACK, FRANCIS G. Columbia University, New York, N. Y.
SLATER, JOHN C. Harvard University, Cambridge 39, Mass.
SLEPIAN, JOSEPH, Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
SLICHTER, L. B. 636 Frances St., Madison, Wis.
SLIGH, T. S., JR. 3409 Rodman St., N.W., Washington, D. C.
SLOCTEMYER, HUGO F. St. Louis University, St. Louis, Mo.
*SLOCUM, ALLISON W. 295 Maple St., Burlington, Vt.
SMEDE, LLOYD, 523 Trenton Ave., Wilkinsburg, Pa.
SMITH, ALVA W. Ohio State University, Columbus, Ohio.
*SMITH, ALPHEUS W. Ohio State University, Columbus, Ohio.
SMITH, ARTHUR B. 2324 Hartzell St., Evanston, Ill.
*SMITH, ARTHUR W. 1008 Oakland Ave., Ann Arbor, Mich.

SMITH, C. ARTHUR, 1266 East Fifth South St., Salt Lake City, Utah.
SMITH, CHARLES G. 38 Andrews Ave., Medford, Mass.
SMITH, CHARLES M. 152 Sheetz St., West Lafayette, Ind.
SMITH, CLARENCE R. Aurora College, Aurora, Ill.
*SMITH, F. E. Director of Scientific Research, Admiralty, London S. W., England.
*SMITH, FRANCIS H. University Station, Charlottesville, Va.
SMITH, FRANK L. 5535 Kimbark Ave., Chicago, Ill.
SMITH, H. GRAYSON, 480 Huron St., Toronto 5, Ontario, Canada.
SMITH, IRVING B. 4901 Stenton Ave., Philadelphia, Pa.
SMITH, JAMES J. P.O. Box 776, Schenectady, N. Y.
SMITH, JOHN E. 1039 Park Ave., Franklin, Ind.
SMITH, KEITH K. Science Hall, Evanston, Ill.
SMITH, KENNETH O. University of Illinois, Urbana, Ill.
SMITH, LEON E. University of Pennsylvania, Philadelphia, Pa.
*SMITH, NEWLAND F. The Citadel, Charleston, S. C.
SMITH, ORRIN H. 410 East Walnut Street, Greencastle, Ind.
SMITH, RUSSELL P. University of Pennsylvania, Philadelphia, Pa.
SMITH, SINCLAIR, 1033 Galena Ave., Pasadena, Calif.
*SMITH, T. TOWNSEND, University of Nebraska, Lincoln, Neb.
SMITH, WILLIAM O. University of Pittsburgh, Pittsburgh, Pa.
SMYTHE, WILLIAM R. California Institute of Technology, Pasadena, Calif.
SMYSER, FREDERIC H. 81 Rockaway Ave., Clifton, Mass.
*SMYTH, HARRY D. Princeton University, Princeton, N. J.
*SNOOK, H. CLYDE, Bell Telephone Laboratories, Inc., 463 West St., New York, N.Y.
*SNOW, BENJAMIN W. University of Wisconsin, Madison, Wis.
SNOW, CHESTER, Bureau of Standards, Washington, D. C.
SNYDER, RUFUS H. Ohio State University, Columbus, Ohio.
*SPARROW, CARROLL M. University of Virginia, University, Va.
SOLLER, THEODORE, University of Wisconsin, Madison, Wis.
SOLT, IRVIN H. University of Cincinnati, Cincinnati, Ohio.
*SOMERVILLE, A. A. 50 East 42nd St., New York, N. Y.
SORENSON, ANDREW J. 1204 East End Ave., Pittsburgh, Pa.
*SOSMAN, ROBERT B. Geophysical Laboratory, 2801 Upton St., Washington, D. C.
*SOUDER, WILMER H. Bureau of Standards, Washington, D. C.
*SOUTHALL, J. P. C. Columbia University, New York, N. Y.
SOUTHWORTH, G. C. American Telephone and Telegraph Co., 195 Broadway, New York, N. Y.
SOWERS, NELSON E. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
SPEAS, WILLIAM E. Wake Forest, N. C.
*SPENCE, BARTHOLOMEW J. Northwestern University, Evanston, Ill.
SPENCER, CHARLES D. 1133 East 152nd St., Cleveland, Ohio.
SPENCER, ROY C. Y.M.C.A. of the Oranges, Orange, N. Y.
SPENCER, S. R. 821 Speight Ave., Waco, Tex.
*SPERRY, ELMER A. c/o The Sperry Gyroscope Co., Manhattan Bridge Plaza, Brooklyn, N. Y.
*SPINNEY, L. B. Iowa State College, Ames, Iowa.
SPOONER, THOMAS, 1126 East End Ave., Swissvale, Pa.
*SQUIER, GEORGE O. Metropolitan Club, Washington, D. C.
STAFF, HELEN, University of California, Berkeley, Calif.
STANG, AMBROSE H. Bureau of Standards, Washington, D. C.
STANLEY, WINTHROP H. 145 College Ave., Waterville, Me.

STANWICK, CHARLES A. 33 Beech St., East Orange, N. J.
STARKE, RAYMOND R. Harvard University, Cambridge, Mass.
STATES, M. N. University of Kentucky, Lexington, Ky.
STAUSS, HENRY E. University of California, Berkeley, Calif.
STEARNS, FENTON V. 825 Clarissa St., Pittsburgh, Pa.
*STEBBINS, JOEL, Washburn Observatory, Madison, Wis.
STECHSCHULTE, VICTOR C. St. Mary's College, St. Mary's, Kan.
STEELE, B. L. State College of Washington, Pullman, Wash.
STEFFEY, W. W. Rural Retreat, Va.
STEIN, I. MELVILLE, Engineers' Club, 1317 Spruce St., Philadelphia, Pa.
STEINBERG, JOHN C. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
STEINBERGER, R. L. 15 Conant Hall, Cambridge, Mass.
STEMPEL, W. M. Stevens Institute, Hoboken, N. J.
*STENSTROM, WILHELM, University of Minnesota, Minneapolis, Minn.
STEPHENSON, BIRD R. Marland Oil Co., Ponca City, Okla.
STEPHENSON, EDWARD B. 1912-37th St., N.W., Washington, D. C.
STETSON, HARLAN T. 25 Hurlbut St., Cambridge, Mass.
STEVE, W. F. 1216 West Johnson St., Madison, Wis.
STEVENS, FREDERICK W. 1741 Lanier Place, N. W., Washington, D. C.
*STEVENS, JAMES S. University of Maine, Orono, Me.
*STEWART, G. W. State University of Iowa, Iowa City, Iowa.
*STEWART, JOHN Q. 14 Prospect Ave., Princeton, N. J.
STEWART, MAUDE G. 410 Winona St., Northfield, Minn.
*STEWART, OSCAR M. 211 Hicks Ave., Columbia, Mo.
STIFLER, W. W. Amherst College, Amherst, Mass.
STILES, HAROLD, 815 Sixth St., Ames, Iowa.
STILLHAMER, A. G. 705 North East St., Bloomington, Ill.
STIMSON, H. F. Bureau of Standards, Washington, D. C.
STODDARD, CHARLES F. 29 West 57th St., New York, N. Y.
STOEKLE, E. R. 567 Belleview Place, Milwaukee, Wis.
STOKES, JAMES S. 1220 East Normal Ave., Kirksville, Mo.
STONE, C. G., JR. 273 Rich Ave., Mt. Vernon, New York.
*STONE, ISABELLE, 1626 Rhode Island Ave., N.W., Washington, D. C.
STRANATHAN, JAMES D. 1900 Vermont St., Lawrence, Kan.
*STRATTON, S. W. Massachusetts Institute of Technology, Cambridge, Mass.
*STRONG, WILLIAM W. 500 South York St., Mechanicsburg, Pa.
STÜCKLEN, HILDEGARD, Zurich, Fichtenstr, 28, Switzerland.
STUDER, FRANK J. University of Wisconsin, Madison, Wis.
*STUHLMAN, OTTO, University of North Carolina, Chapel Hill, N. C.
STUTZ, GEORGE F. A., JR. 544 Lafayette Ave., Palmerton, Pa.
STUTZ, WALTER F. Bureau of Standards, Washington, D. C.
SUMMERS, R. DEWEES, University of Pennsylvania, Philadelphia, Pa.
SUN, KUO F. Northeastern University, Mukden, China.
SUPAO, TING, Northeastern University, Mukden, China.
SUSSMAN, MOSSEY, New York University, University Heights, New York, N. Y.
SUTTON, RICHARD M. Norman Bridge Laboratory, Pasadena, Calif.
SWAIM, VERNE F. Bradley Polytechnic Institute, Peoria, Ill.
SWAN, CLIFFORD M. 292 Madison Ave., New York, N. Y.
*SWANN, W. F. G. Yale University, New Haven, Conn.
SWEET, REGINALD C. 124 East Symmes St., Norman, Okla.
SWISHER, CHARLES L. Agricultural College, Fargo, N. D.

*Takamine, Toshio, 43, Otsuka Kubocho, Koishikawa, Tokyo, Japan.
Tanch, J. W. Dartmouth College, Hanover, N. H.
Tasker, Homer G. University of California, Berkeley, Calif.
*Tate, John T. University of Minnesota, Minneapolis, Minn.
Taylerson, Ewart S. 733 Gallion Ave., South Hill Station, Pittsburgh, Pa.
Taylor, A. Hadley, Nela Research Laboratory, Cleveland, Ohio.
*Taylor, Albert H. U.S.N. Experimental and Research Laboratory, Bellevue, D. C.
Taylor, E. Gordon, College of the City of New York, N. Y.
Taylor, John B. 23 Lowell Road, Schenectady, N. Y.
Taylor, H. O. The John Brown University, Sulphur Springs, Ark.
Taylor, Lloyd W. Oberlin College, Oberlin, Ohio.
Taylor, Lucian B. 476 Belmont St., Watertown, Mass.
Taylor, Paul B. 4520 Kingsessing Ave., Philadelphia, Pa.
Taylor, Paul K. Northwestern University, Evanston, Ill.
*Taylor, Thomas S. Bakelite Corporation, 230 Grove St., Bloomfield, N. J.
Tear, James D. Research Laboratory, General Elec. Co., Schenectady, N. Y.
Terrill, H. M. Institute of Cancer Research, 1145 Amsterdam Ave., New York, N. Y.
*Terry, Earle M. University of Wisconsin, Madison, Wis.
Terry, Halstead C. 556 Wabash St., Toledo, Ohio.
Then, John W. 207 Bryant Ave., Ithaca, N. Y.
Thomas, Charles H. Princeton University, Princeton, N. J.
Thomas, Phillips, Westinghouse Research Laboratory, East Pittsburgh, Pa.
Thomas, Tracy Y. 1622 West 9th St., Little Rock, Ark.
Thompson, C. G. 553 Arlington Ave., Berkeley, Calif.
Thompson, George E. Iowa State College, Ames, Iowa.
Thompson, Harry C. 302 Van Antwerp Road, Schenectady, N. Y.
*Thompson, Joseph O. 45 Lincoln Ave., Amherst, Mass.
Thompson, Louis, Naval Proving Ground, Dahlgren, Va.
Thompson, Robert N. 25 Greenwood Ave., Atlanta, Ga.
Thomson, Andrew, Apia Observatory, Apia, Western Samoa.
Thomson, Earl W. Dept. E. E. and Physics, Naval Academy, Annapolis, Md.
*Thomson, Elihu, General Electric Co., Lynn, Mass.
Thuras, Albert L. Bell Telephone Laboratories, Inc., 463 West St., New York, N.Y.
*Thwing, Charles B. 3339 Lancaster Ave., Philadelphia, Pa.
*Tillyer, E. D. American Optical Company, Southbridge, Mass.
Tisdale, W. E. B and 21st Sts., Washington, D. C.
Titus, Tillman G. 512 Avenue K North, Saskatoon, Sask., Canada.
*Tolman, R. C. California Institute of Technology, Pasadena, Calif.
Tonks, Lewi, 520 Mohawk Ave., Scotia, N. Y.
Tool, A. Q. Bureau of Standards, Washington, D. C.
Townshend, Bailey, 108-30th St., Jackson Heights, New York, Y. Y.
Townshend, Louisa L. 108-30th St., Jackson Heights, New York, N. Y.
Tripp, William A. 166 West Ave., Pawtucket, R. I.
*Trowbridge, Augustus, Credit Lyonnais, Boulevard des Italiennes, Paris, France.
*Troland, Leonard T. Harvard University, Cambridge, Mass.
Trueblood, H. M. 195 Broadway, New York, N. Y.
Truesdell, Waldo B. College of the City of New York, New York, N. Y.
Trytten, Merriam H. 3409 Terrace St., Pittsburgh, Pa.
Tschaler, Marguerite D. 71 Sawyer Ave., Dorchester, Mass.
Tschudi, Erwin W. Winthrop College, Rock Hill, S. C.
Tucker, Forrest G. Cornell University, Ithaca, N. Y.

*Tuckerman, L. B. 4605 Stanford St., Chevy Chase, Md.
*Tugman, Orin, University of Utah, Salt Lake City, Utah.
Turner, Alva, Hunter College, East 68th St., New York, N. Y.
Turner, Louis A. Princeton University, Princeton, N. J.
Twisden, H. S. 10 Harvard Ave., East Saugus, Mass.
Tykociner, Joseph T. University of Illinois, Urbana, Ill.
Tyler, Hazen G. 2226 Loring Place, New York, N. Y.
Tyndall, Edward P. T. University of Iowa, Iowa City, Iowa.

*Uhler, Horace S. Yale University, New Haven, Conn.
Ulrey, Clayton, Research Laboratory, Westinghouse Lamp Co., Bloomfield, N. J.
Ulrey, Dayton, Research Laboratory, Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.
Underhill, C. R. 12 Roman Ave., Forest Hills, N. Y.
Unnewehr, E. C. 81 Seminary St., Berea, Ohio.
Upton, Frederick P. Lanham, Md.
Urey, Harold C. Johns Hopkins University, Baltimore, Md.
Utterback, Carl P. 2601 Elm St., Denver, Colo.
Utterback, Clinton L. University of Wisconsin, Madison, Wis.

*Valasek, Joseph, University of Minnesota, Minneapolis, Minn.
Vallarta, M. S. Massachusetts Institute of Technology, Cambridge, Mass.
*Van der Bijl, H. J. Electricity Supply Commission, P.O. Box 1091, Johannesburg, South Africa.
*Van Dusen, M. S. Bureau of Standards, Washington, D. C.
Van Dyck, Pierre, 524 Columbia Ave., Palmerton, Pa.
Van Dyke, Karl S. Middletown, Conn.
Van Horn, Irving H. Nela Park, Cleveland, Ohio.
*Van Orstrand, C. E. 1607-31st St., N.W., Washington, D. C.
*Van Vleck, J. H. 1229-7th St., S.E., Minneapolis, Minn.
Van Voorhis, Cletus C. Princeton University, Princeton, N. J.
Vaughan, Lena, Mississippi State College for Women, Columbus, Miss.
*Veblen, Oswald, 58 Battle Road, Princeton, N. J.
Vennes, Harold J. 121 Shearer St., Montreal, Canada.
*Vinal, George W. Bureau of Standards, Washington, D. C.
Vogdes, Francis B. 1039 Stanford St., Schenectady, N. Y.
Vollmayer, Leo J. St. Louis University, St. Louis, Mo.
*Von Nardroff, Ernest R. 397 Madison St., Brooklyn, N. Y.
Von Nardroff, Robert, Columbia University, New York, N. Y.
*Vreeland, F. K. 90 West St., New York, N. Y.

Waddell, Senn, University of Tulsa, Tulsa, Okla.
Wadlund, Arthur, 29 Catherine St., Hartford, Conn.
Wagner, Albert F. P. O. Box 516, Annapolis, Md.
Wahlin, Hugo B. University of Wisconsin, Madison, Wis.
Wainwright, Lawrence, U.S.S. Shawmut, c/o Postmaster, New York, N. Y.
Wait, G. R. Department of Terrestrial Magnetism, Washington, D. C.
Waldbauer, Louis J. 2918 Keokuk St., St. Louis, Mo.
Waldie, Alma T. 7200 Cresheim Road, Mt. Airy, Pa.
Wallis, Cyril T. Bluff Point Drive, Stop 17, St. Paul Boulevard, Rochester, N.Y.
*Walters, Francis M. Carnegie Institute of Technology, Pittsburgh, Pa.
Walton, Albert S. 246 Fourth Ave., Phoenixville, Pa.

WARBURTON, FRED W. Cornell University, Ithaca, N. Y.
WARFIELD, CALVIN N. 2929 St. Paul St., Baltimore, Md.
WARNER, ARTHUR H. California Institute of Technology, Pasadena, Calif.
WARNER, EARLE H. 510 East 4th St., Tucson, Ariz.
WARNER, EDWARD P. Massachusetts Institute of Technology, Cambridge, Mass.
WARNER, JOHN C. Research Laboratory, General Electric Co., Schenectady, N. Y.
WARREN, BERTRAM E. Massachusetts Institute of Technology, Cambridge, 39, Mass.
*WASHBURN, E. W. Bureau of Standards, Washington, D. C.
WATERFALL, WALLACE, c/o The Celotex Co., 645 North Michigan Ave., Chicago, Ill.
WATERMAN, ALAN T. Sloane Laboratory, Yale University, New Haven, Conn.
*WATERMAN, FRANK A. Smith College, Northampton, Mass.
WATERMAN, FRANK N. 220 Broadway, New York, N. Y.
WATSON, E. C. California Institute of Technology, Pasadena, Calif.
*WATSON, FLOYD R. University of Illinois, Urbana, Ill.
WATSON, WILLIAM W. University of Chicago, Chicago, Ill.
WEATHERBY, BENJAMIN B., 2nd. University of Pennsylvania, Philadelphia, Pa.
WEATHERWAX, JAMES L. Pathological Laboratory, Philadelphia General Hospital, Philadelphia, Pa.
WEAVER, WARREN, 1852 Summit Ave., Madison, Wis.
*WEBB, HAROLD W. Columbia University, New York, N. Y.
WEBB, JULIAN H. University of Wisconsin, Madison, Wis.
WEBB, W. S. 363 Transylvania Park, Lexington, Ky.
*WEBSTER, DAVID L. Stanford University, Calif.
WEEKS, JOHN R., JR. 52 Wayne Ave., East Orange, N. J.
WEEKS, PAUL T. 41 Ravine Ave., Caldwell, N. J.
WEGEL, R. L. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
WEIGLE, JEAN JACQUES, University of Pittsburgh, Pittsburgh, Pa.
WEINBERG, FRED, 1941 Blake St., Berkeley, Calif.
*WELD, LEROY D. 1531 B. Ave., Cedar Rapids, Iowa.
WELLS, PHILIP V. 73 Jefferson Road, Princeton, N. J.
WELO, L. A. Rockefeller Institute for Medical Research, 66th St. and Ave. A. New York, N. Y.
WELO, EDNA L. 530 East 22nd St., Brooklyn, N. Y.
WEN, YU CHING, Y.M.C.A., Room 13, Peking, China.
WENDT, GERALD L. Pennsylvania State College, State College, Pa.
*WENIGER, WILLIBALD, Oregon Agricultural College, Corvallis, Ore.
*WENNER, FRANK, Bureau of Standards, Washington, D. C.
WENRICH, C. N. Armstrong Cork Co., Lancaster, Pa.
WENTE, E. C. Bell Telephone Laboratories, Inc., 463 West St., New York, N. Y.
*WEST, FRANKLIN L. Utah Agricultural College, Logan, Utah.
WESTHAFER, WILLIAM R. College of Wooster, Wooster, Ohio.
*WESTON, EDWARD, 37 North Mountain Ave., Montclair, N. J.
*WETZEL, R. A. College of the City of New York, New York, N. Y.
*WHEELER, E. B. 2059 Midlothian Drive, Pasadena, Calif.
WHEELER, HAROLD A. 5503-33rd St., N.W., Washington, D. C.
*WHEELER, LYNDE P. Naval Research Laboratory, "Bellevue," Anacostia, D. C.
WHEELER, NATHANIEL E. Colby College, Waterville, Me.
WHITE, DEANE R. Columbia University, New York, N. Y.
WHITE, MARSH W. 222 South Gill St., State College, Pa.
*WHITE, WALTER P. Geophysical Laboratory, Washington, D. C.

WHITE, WILLIAM B. 5149 Agatite Ave., Chicago, Ill.
WHITEHORNE, WILLIAM R. Bates College, Lewiston, Me.
WHITMAN, VERNON E. Bureau of Standards, Washington, D. C.
WHITNEY, JOHN D. State University of Iowa, Iowa City, Iowa.
WHITNEY, WALTER T. 988 North Holliston Ave., Pasadena, Calif.
*WHITNEY, W. R. Research Laboratory, General Electric Co., Schenectady, N. Y.
WHITTEMORE, C. F. 18th and Blake Sts., Denver, Colo.
WHITTEMORE, LAURENS E. American Telephone and Telegraph Co., 195 Broadway, New York, N. Y.
*WICK, FRANCES G. Vassar College, Poughkeepsie, N. Y.
WILBER, DAVID T. Cornell University, Ithaca, N. Y.
*WILCOX, GUY M. 5225 Ingleside Ave., Chicago, Ill.
WILCZEWSKI, JOSEPH, St. Xavier College, Evanston Station, Cincinnati, Ohio.
WILKINS, T. R. University of Rochester, Rochester, N. Y.
WILLARD, GERALD W. University of Minnesota, Minneapolis, Minn.
*WILLIAMS, ELMER H. University of Illinois, Urbana, Ill.
*WILLIAMS, H. B. 437 West 59th St., New York, N. Y.
WILLIAMS, N. H. 1020 Olivia Ave., Ann Arbor, Mich.
*WILLIAMS, SAMUEL R. Amherst College, Amherst, Mass.
WILLIAMS, W. EWART, Kildare, Ethelbert Road, Bromley, Kent, England.
WILLIAMS. WILLIAM H. 11 Hillside Court, Berkeley, Calif.
WILLIAMSON, R. C. University of Wisconsin, Madison, Wis.
WILLIS, C. H. Lignum, Va.
*WILLS. ALBERT P. Columbia University, New York, N. Y.
WILLS, H. L. 236 Clifton Road, Atlanta, Ga.
WILSEY, REX B. Eastman Kodak Co., Rochester, N. Y.
*WILSON, EDWIN B. 55 Van Dyke St., Boston, 17, Mass.
*WILSON, H. A. The Rice Institute, Houston, Tex.
WILSON, LUCY, 51 Pine Ridge Road, Waban, Mass.
WILSON, R. H. 27 Douglas St., Millburn, N. J.
WILSON, THOMAS A. 1307 Nott St., Schenectady, N. Y.
WILSON, WILLIAM, Jefferson Road, Short Hills, N. J.
WINANS, JOHN G. University of Wisconsin, Madison, Wis.
*WINCHESTER, GEORGE, Rutgers University, New Brunswick, N. J.
WINN, P. B. Washington College, Chestertown, Md.
WINNINGHOFF, W. J. c/o Cooper Hewitt Elec. Co., 730 Grand St., Hoboken, N. J.
WINTER, WILLIAM F. Research Laboratory, General Electric Co., Schenectady, N. Y.
WITMER, ENOS E. 369 Harvard St., Cambridge, Mass.
*WOLCOTT, E. R. 917 Crenshaw Boulevard, Los Angeles, Calif.
*WOLD, P. I. Union College, Schenectady, N. Y.
WOLF, ALFRED, 2321 North Park Ave., Philadelphia, Pa.
WOLFE, LESTER, 923 Fox St., New York, N. Y.
WOLFF, IRVING. Radio Corporation of America, Van Cortlandt Park South and Saxon Ave., New York, N. Y.
WOO, Y. H. Department of Physics, National Southeastern University, Nanking, China.
WOOD, ROBERT S. University of Pittsburgh, Pittsburgh, Pa.
*WOOD, ROBERT W. Johns Hopkins University, Baltimore, Md.
WOODBURY, D. A. Ohio State University, Columbus, Ohio.
*WOODMAN, L. E. 1301 State St., Rolla, Mo.
WOODROW, JAY W. Iowa State College, Ames, Iowa.
WOODRUFF, ALBERT E. 614 South Cuyler Ave., Oak Park, Ill.

WOOLARD, EDGAR W. U. S. Weather Bureau, Washington, D. C.
WOOTEN, BENJAMIN A. Washington and Lee University, Lexington, Va.
*WORTHING, ARCHIE G. University of Pittsburgh, Pittsburgh, Pa.
*WRIGHT, FRED E. Geophysical Laboratory, Washington, D. C.
WRIGHT, J. WARREN, 1119 S. Fountain St., Springfield, Ohio.
WRIGHT, W. R. Swarthmore College, Swarthmore, Pa.
WULFF, ROBERT G. 195 North Euclid Ave., Pasadena, Calif.

YAMASHITA, HIDEO, 411 Shinsaka, Morikawacho, Hongo, Tokyo, Japan.
YAO, Y. T. Nankai College, Tientsin, China.
YATES, RAYMOND F. 1307 Nelson Ave., Bronx, New York, N. Y.
YOSHIDA, USABURA, Physical Laboratory, Kiota Imperial University, Kioto, Japan.
YOUNG, JOHN F. T. University of Manitoba, Winnipeg, Canada.
YOUNG, OTIS B. 685 University Ave., Urbana, Ill.
YOUNG, R. C. College of William & Mary, Williamsburg, Va.

ZAHN, CHARLES T. 103 Graduate College, Princeton, N. J.
ZAIKOWSKY, W. M. 346 South Michigan Ave., Pasadena, Calif.
ZANSTRA, HERMAN, Norman Bridge Laboratory, California Institute of Technology, Pasadena, Calif.
ZARTMAN, IRA F. Box 162, New York University, University Heights, New York, N. Y.
*ZELENY, ANTHONY, 613 East River Road, Minneapolis, Minn.
*ZELENY, JOHN, 44 Cold Spring St., New Haven, Conn.
ZEMANSKY, MARK W. 417 Riverside Drive, New York, N. Y.
ZIMMERMAN, BERNARD C. St. Xavier College, Evanston Station, Cincinnati, Ohio.
ZIMMERMAN, E. E. Cornell University, Ithaca, N. Y.
ZINSZER, HARVEY A. 637 Fifth Ave., Bethlehem, Pa.
ZOBEL, CARL G. F. A.S.H.V.E. Reasearch Laboratory, U. S. Bureau of Mines, Pittsburgh, Pa.
ZOBEL, O. J. 195 Broadway, New York, N. Y.
ZUMSTEIN, R. V. Physics Dept., University of Michigan, Ann Arbor, Mich.
ZWORYKIN, VLADIMIR, 7333 Whipple St., Swissvale, Pa.